

GREEN'S Fruit Grower

"A MAGAZINE WITH A MISSION"

MAY, 1910



GREEN'S FRUIT GROWER

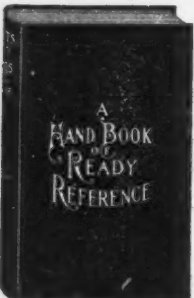


LADIES' PURSE No. 1

This handsome ladies' purse is nickel finish and leather lined. It is about four inches wide by three inches high. **OUR OFFER.** Send us one new subscriber at 50 cents and we will send the above purse postpaid, or given with Green's Fruit Grower for one year for 50 cents.

Green's Fruit Grower, Rochester, N. Y.

A NEW READY REFERENCE BOOK



GREEN offers as a premium or gift to his subscribers. It is called Facts and Forms, a hand-book of ready reference. It gives facts in letter writing, book-keeping, business forms, interest, grain and wage tables, lightning calculators, common and commercial law.

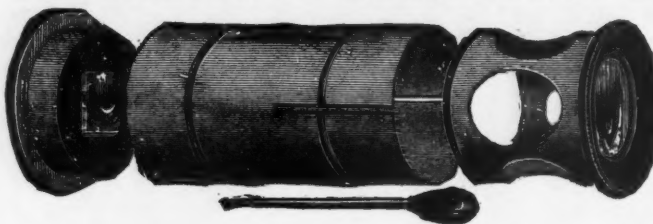
This book is a library of itself for the business man. There are 236 pages illustrated. C. A. Green says this is a valuable book, one

that will be useful to all readers of Green's Fruit Grower.

OUR OFFER. Send us two new subscribers at 50 cents each and we will send you a copy of this book postpaid, or given with Green's Fruit Grower, one year, for 60 cents.

Green's Fruit Grower, Rochester, N. Y.

A SCIENTIFIC MICROSCOPE

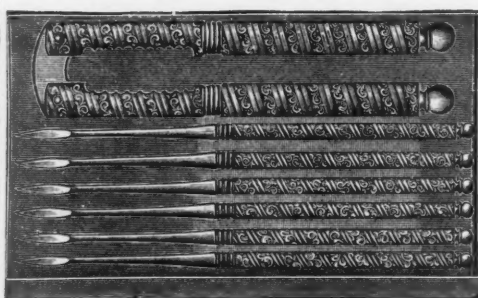


This microscope is especially imported from France. As regards power and convenient handling, good judges pronounce it the best ever introduced for popular use. The cylindrical case is manufactured from highly polished nickel, while there are two separate lenses—one at each end of the microscope. The larger glass is a convex magnifier, adapted for examining insects, the surface of the skin, the hair, fur, or any small article. The other lens is exceedingly powerful, and will clearly delineate every small object entirely invisible to the naked eye. Every farmer, family, school and teachers should own a microscope.

OUR OFFER. If you will send us two subscribers at 50 cents per year, we will send you this scientific microscope, prepaid, or given with Green's Fruit Grower, one year, for 50 cents.

ADDRESS GREEN'S FRUIT GROWER, ROCHESTER, N. Y.

A NICKEL PLATED NUT PICK SET



This is both a useful and an elegant premium. The set consists of a handsome and strong nut crack and six nut picks, all enclosed in a neat box, as shown in the illustration. Both the nut crack and the nut picks are NICKEL PLATED. The material used in the manufacture of both of these articles is the finest steel. The handles of the nut picks are made in a pretty design, while the points are highly polished. The nut crack is of a design corresponding to the nut picks and is made for good strong service.

OUR OFFER. If you will send us three new subscribers to Green's Fruit Grower at 50 cents per year we will send you this Nut Pick Set for your trouble, charges prepaid, or given with G. F. G., one year, for 60 cts.

Address GREEN'S FRUIT GROWER, Rochester, N. Y.



This purse is like the one in which Mr. Green carries his silver

and paper money. It is made of two thicknesses of leather, leather lined, with three compartments as shown in photograph above. **OUR OFFER.** Send us one new subscriber at 50 cents and we will send you the above pocketbook postpaid, or given with Green's Fruit Grower, one year, for 50 cents.

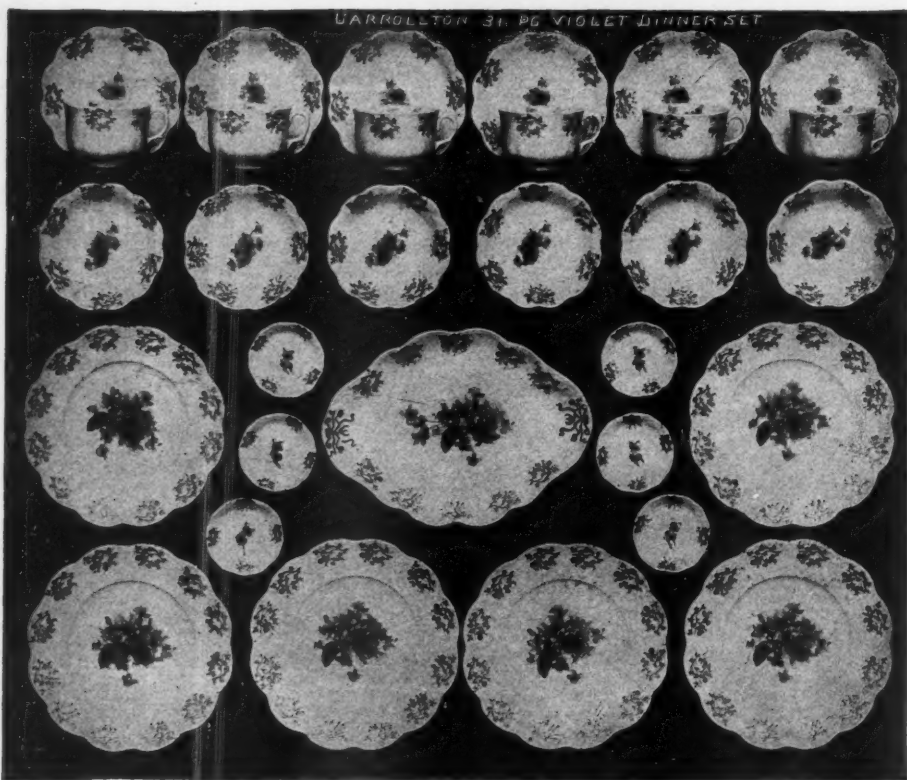
Green's Fruit Grower, Rochester, N. Y.



LADIES' PURSE No. 2

This handsome ladies' purse is gilt finish and leather lined. It is about five inches wide by three inches high. **OUR OFFER.** Send us one new subscriber at 50 cents and we will send you the above purse postpaid, or given with Green's Fruit Grower, one year, for 50 cents.

Order this Set of Dishes now and make yourself a Handsome Present



"CARROLLTON WARE"

This Engraving Illustrates Our 31-piece Set.

N. B.—Send for our complete circular showing this set of dishes in the different colors—violets with green leaves in centre, border design in pure gold.

This ware is of a fine grade of porcelain, which is light weight, and said to be very tough and durable. It is snowy white in color and has a genuine china glaze, which gives it a smooth and velvety appearance.

The shapes are the latest Haviland design, with deep scalloped edges, and handsomely ornamented with scroll work. Each piece is decorated with a beautiful cluster of violets, with foliage and green leaves all in natural colors. Each piece has also an elaborate semi-border of vining sprays in pure gold. The decorations are burned into the ware.

The 31-piece set consists of six cups, six saucers, six dinner plates, six desserts, six individual butters, and one meat platter.

Receiver to pay freight charges. Weight, boxed, about 20 pounds.

Note.—We have two shipping points—one east and one west. Dinner set will be sent from the one nearest your home, hence freight or express charges will be light. Read what some of our patrons say about this set:

Mr. Charles A. Green:—Received the dinner set in good order; they are certainly very pretty and one of the most liberal offers I have ever seen given with any paper. I thank you very much for the same.—Mrs. R. D. Wilson, Vanceburg, Ky., Jan. 13, 1908.

Editor Green's Fruit Grower:—I want to write to you thanking you for the pretty dishes we received from you the day before Christmas. The dishes are as you represented them, very neat and nice. We have used them every day since they came. Sickness has delayed my writing you before.—Mrs. Henry Clark, Orange, Conn., Jan. 20, 1908.

Mr. Charles A. Green:—I received the set of dishes O. K. My wife thinks they are beauties. Please accept our thanks for same. We wish you and your paper much success. The "Fruit Grower" is hard to beat.—Daniel E. Hartnett, Dover, Del., Jan. 24, 1908.

Green's Fruit Grower:—I have received the dishes and am delighted with them. They reached me in good condition. Thanking you for your liberal offer and straight dealing.—Marcia L. Moore, Battle Creek, Mich., Jan. 2, 1908.

Mr. Green:—We desire to thank you for the beautiful dinner set you sent us in connection with your good paper a few days ago, which arrived in good condition. The dishes are certainly fine, both in appearance as well as durability.—William Mote, Hayden, Ind., Jan. 16, 1908.

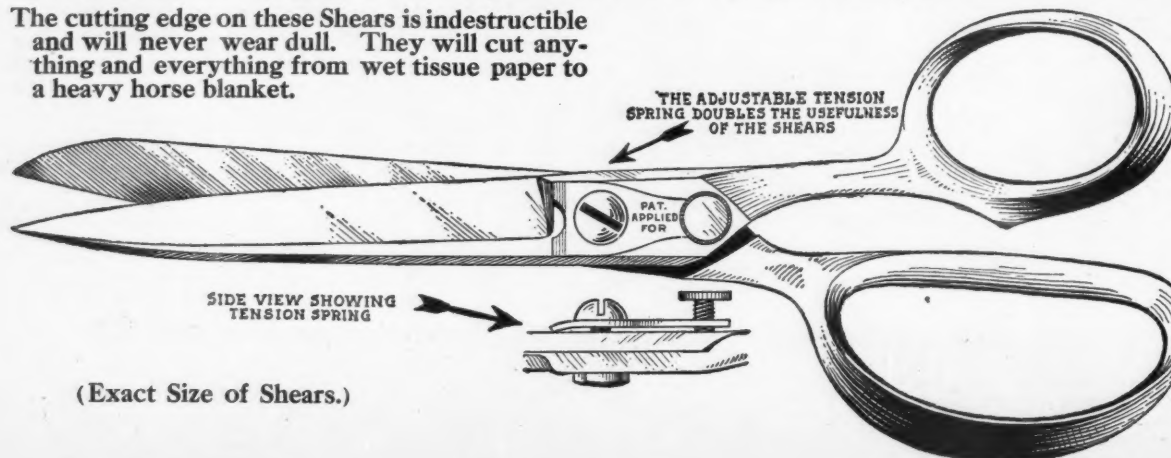
Our Offer: A paid-in-advance subscription to January, 1913, and this 31-piece set of dishes for \$2.75. Address, Green's Fruit Grower, Rochester, N. Y.

Do not let the fact that you live some distance from us hinder you from ordering this set as we are shipping these dishes all over the UNITED STATES.

If your order is received before Sept. 30th, we will mail you a handsome reproduction of an oil painting securely packed in a strong tube. Size of picture, 16 x 20 inches.

THESE NICKEL PLATED PATENT TENSION STEEL SHEARS

The cutting edge on these Shears is indestructible and will never wear dull. They will cut anything and everything from wet tissue paper to a heavy horse blanket.



(Exact Size of Shears.)

This special offer to our readers consists of what is one of the most useful articles ever invented—a first-class 8-in. pair of Shears, equipped with a new and simple attachment that keeps them always sharp and enables the user to cut anything from wet tissue paper to the heaviest cloth. The illustration shows the tension spring, the device which doubles the usefulness of the Shears and keeps them always sharp. The Shears offered here are made from the best carbon steel by a new process which insures strength and a good, keen, cutting edge. The tension spring takes up all the wear on the rivet, making the shears practically indestructible, with no wear-out to them. A simple turn of the little thumb-screw shown in the engraving tightens up the blades as closely as may be desired. We guarantee the quality of the material and workmanship in this pair of shears to be first-class, that the tension spring device doubles the usefulness of the shears, and furthermore, the manufacturers' certificate accompanies every pair, agreeing that "If this pair of shears breaks or in any way becomes defective within five years from date of purchase, it will be replaced—a new pair without cost."

OUR OFFER. If you will send us two new subscribers to Green's Fruit Grower at 50 cents per year we will send you a pair of these shears for your trouble, postpaid, or given with G. F. G., one year, for 60 cents.

ADDRESS GREEN'S FRUIT GROWER CO., ROCHESTER, N. Y.

GREEN'S FRUIT GROWER

A Monthly Magazine for the Fruit Growing Farmer and His Family.

CHARLES A. GREEN, Editor

Volume 30.

ROCHESTER, N. Y., MAY, 1910.

Number 5.

How to Grow Good Strawberries.

This statement can hardly be controverted. There are more strawberries grown for sale than of all other berries, says "Up to Date Farming."

The Soil for Strawberries.

While strawberries will grow in many kinds of soil, yet they will do better in loose, sandy loam which is filled with humus, as they are great consumers of nitrogen, and the soil must be rich as they are gross feeders. Care should be used in the selection of the plot in which it is intended to grow strawberries. One should be selected which has been seeded to a legume, which should be plowed under, and the plot kept well cultivated to keep it free from weeds, as it is especially desirable that a strawberry-bed be as free from them as possible.

If a plot cannot be had with a legume to turn under (give a heavy application of well-rotted stable-manure which has been used to absorb the liquids from the stalls. This will add to the humus content, and give the needed nitrogen. The ground can, if desired, be put in some highly cultivated crop, and be well tilled during the summer, and given a disking or tooth-harrowing in the fall. In the spring it should be deeply plowed, as this is the only possible chance to deeply cultivate the soil during the life of the plot as a strawberry patch.

Follow the plow with the disk, as the clods are then most easily broken up. If the soil does not disk mellow, it is recommended that it be again turned, and re-disked. Follow the disk with the smoothing harrow, and then the leveller, making the top perfectly level. If the soil is still cloddy, use the medium weight roller, but use care to not pack the soil too firmly if of a limestone loam, but on the other hand, in those sections where the soil is very sandy, the results have been best when the soil was firmed with the light roller.

Sod land should not be used for strawberries until it has had at least one year's cultivation under some crop such as corn or potatoes, and then manure heavily and treat as above. Some of the experiment stations recommend that such land be furrowed late in the fall to destroy most of the insects over winter.

Fertilizer for Strawberries.

It has been demonstrated by experiment that there are a number of good formulas for fertilizers which are adapted to the growing of strawberries. A good home-made one is three parts of hard wood ashes to one of ground bone, harrowed in, using from one to two tons to the acre, according to the necessities and character of the soil. With this is used, when the buds break, nitrate of soda solution, in the proportion of one ounce of the crystals to three gallons of water, giving each plant a pint of the solution. Another formula which has given the finest result is (per acre):

1500 pounds of cotton-seed meal,
1000 pounds acid phosphate,
250 pounds kaigut.

An analysis of the above shows 7 per cent. nitrogen, 14 per cent. phosphoric acid, and 12 per cent. potash. This will give 105 pounds of nitrogen to the acre, and will produce fruit of large size, fine color, and good substance, which will make them stand up well under shipping conditions. There are also a number of good specially made fertilizers on the market, put up by reliable dealers, which are advertised in these columns. Keep in mind that the strawberry requires plenty of nitrogen, and you can hardly go wrong.

The Young Plants.

Every berry grower should have a small nursery in his patch, and it should be at the best drained and warmest portion. In this should be grown the young plants which will be needed each year with which to set out his new ground. Those who grow the strawberry commercially will desire to have a patch coming into its second year's bearing every year, as this method gives the finest fruits, and catches the best prices. In the plant-nursery the

mother-plants should not be allowed to bear fruit, and they should be grown flat, and not in the hill-row system as are the fruiting plants. This nursery should have the best possible cultivation prior to the time when the runners are ready to root, after which, if given at all, it should be done by hand. For hardy, thrifty, well-rooted plants, do not allow more than four runners to a mother-plant in one season, keeping off all others. You will get fair ones by allowing six to mature, but if more than that are allowed the best results can not be assured.

a mulching of straw or hay. For best results do not use the same plants for mother-plants more than two seasons, but they can be fruited the third season, when it will be their time to be plowed under. The life of a strawberry-patch should cover four seasons, one as young, partially bearing, plants and three as full-bearing, when they should be plowed under and another patch used which has been started at another place. In the home garden when grown by the hill-system, young plants can be planted at the inter-sections, and the locations where the old ones stood become the cultivated portions, but this requires heavy fertilizing.



STRAWBERRIES ARE RIPE.—This strawberry box is used largely in the south.

For the home garden, where the number grown is not large, or in case you are growing plants to sell, they should be potted. This is done by letting the runner-bud settle down to the ground, and then sink a two-and-a-half inch pot, level with the top, under it, when it will root in the soil of the pot. With the trowel in the right hand scoop out the soil, and set the pot in the hole with the left, and the trowel will quickly smooth around it. An experienced hand will set many hundreds in a day.

Some persons advocate cutting the young potted plants loose from the mother-plant as soon as they take root, while others allow them to remain attached until cold weather. Let them remain attached a month, when they are cut loose and become independent plants. The young plants must be kept well watered during the hot dry season of mid-summer, as one drying out of the tender rootlets is fatal. After they are all established in the pots they can be mulched with straw or meadow-hay.

If you are going to grow a large number of plants and will root them in the open ground, go along the rows as soon as the runner-bud is fully formed and turn them all over the parent plants and give the soil along the rows fine cultivation, release the young runners, and they will have a fine bed into which to root, which they should do after the next rain, or sooner, if irrigated or watered. It is hardly possible to cultivate the young plants, and as soon as they have become well rooted it is best to cut them loose from the mother-plant and give them

Setting the Plants.

One of the most important things to be done in the making of a strawberry-patch is the proper setting of the plants, which includes all the treatment they require after being taken from the pots until they are set in the soil. If you get the plants from a dealer, if they are potted ones, they can be set in a shallow trench, balls of soil and all and carefully packed about by hand to prevent air-spaces at the roots, and allowed to remain until needed for planting. However, if they are rooted-runners, grown flat, dig a trench a little deeper than the length of the roots, with one side perpendicular. Straighten out the roots, spreading them out at the same time, flat, along the perpendicular wall of the trench, and with the hand pack the soil tightly about them, being careful not to allow any air space.

All strawberry plants which have been properly rooted should be carefully root-pruned before being set out, and just at the time of planting. Cut off an average of one third of the roots, and trim off all the dead, rusty and large foliage, leaving only the foliage which makes up the crown. This makes the proper balance between the root and the top, and relieves the plant of the necessity of providing for the superannuated large leaves of the previous season. It will grow what it needs for the next season.

The value of the farm products of the country for the year was estimated at \$8,760,000,000, the highest on record, in the annual report of Secretary of Agriculture Wilson.

About San Jose Scale.

Green's Fruit Grower: Not receiving any word from you I have wondered if you have received my communication in regard to the mite that is eradicating the San Jose scale in this vicinity.

On the 7th of the present month, April, I discovered an important fact in regard to these mites. It occurred in this way: Although there are in this vicinity a large number of trees that have been more or less injured by the scale it is now difficult to find trees with live scale.

At the above date while examining the twigs with a magnifying glass of the live portion of a tree the larger portion of whose branches had been killed by the scale, I discovered that there were a great number of these mites all over the live portion of the tree. They appeared to have but recently hatched from the egg. They were so small as to be scarcely discernible by the naked eye.

These mites were evidently hatched from eggs laid on the twigs the latter part of last year. They make their appearance so early that they are ready for the first young scale that appear this season and they are numerous enough to devour at once every young scale that shows itself on that tree this spring.

Last year I discovered what appeared to be a winged form of this insect. If this should prove correct it explains how the insect succeeded in finding trees with live scale on which to lay their eggs. Last year I wrote to the U. S. department of agriculture in regard to their destruction of the San Jose scale. The fact that they were effectually destroying the scale was not known to the bureau of entomology of the department. After several unsuccessful attempts to send live specimens to the department I succeeded by direction of L. O. Howard, chief of the bureau of entomology, in sending specimens preserved in alcohol. They called the red mite *Rhyncholophus pilosus*, a species common in the eastern states and often found feeding on various kinds of scale insects.

The following facts suggest the idea that these insects instead of being the *Rhyncholophus pilosus* may be an Asiatic species very closely resembling it but proving to be the natural enemy of the San Jose scale, that has been accidentally imported like the scale itself. First, they appear to confine their attacks to the San Jose scale and are exceedingly destructive to it. Secondly, they have made their appearance in southern California out of the region of the natural distribution of the *Rhyncholophus pilosus*. Their work has been so effectual in this vicinity that it appears probable by another year that both the scale and mites will have almost entirely disappeared.—S. W. Underhill, Croton-on-Hudson, N. Y.

Destroying Gooseberry Worms.

J. B. H., to "R. New Yorker."—How can I kill gooseberry worms? Ans.—You can easily destroy the gooseberry worms by dusting or spraying the bushes as soon as they are noticed with paris green, made somewhat weaker than you would use for the slug of the potato beetle. Powdered hellebore, which may be obtained from any druggist, is also a certain remedy for the currant and gooseberry worm. It should be dusted or blown over the bushes as soon as the worms are noticed. The worms are the larvae of a small fly. They generally lay their eggs on the leaves in the middle of the bushes. The young worms being destroying the foliage from within, and by the time they are noticed on the outside of the bushes are nearly full grown and have done much harm. By keeping a sharp watch and frequently parting the branches soon after the leaves come out you will notice them before much harm has been done, when they should be immediately destroyed by either of the two remedies mentioned. The use of paris green early in the season is not at all dangerous, as it is washed off the young fruits by rains long before they ripen.

He who commits no crime requires no law.—Antiphanes.



Miss Dolly Rose is to pay \$450 for the above house and lot, located in the country. She is a cripple. She has not left her couch in many years. C. A. Green and others are helping her pay for her little home. Her address is Manchester, Ohio, Box 145.

She wishes me to thank subscribers of Green's Fruit Grower who have kindly sent her small sums of money. It makes any one happier and better satisfied with life to be of some assistance to such a deserving unfortunate.

"Ol' Nutmeg's" Sayings.

Written for Green's Fruit Grower by Jone Cone.

"Keep Off the Grass."

The signs of spring are on the lawn, Wherever one may pass; There should be one in gardens, too, To read: "Keep out the grass!"

Heart warmth is the best heat known. The bird that can sing orter be allowed to sing.

Keep to the right an' you're more apt to git ahead.

Tain't the tainted money; it's the tainters who taint the money.

When the hobby rides the rider it's time to git out an' walk.

Don't blame your wife fur ev'ry-thing, an' don't blame the weather fur anything.

Ef life wuz all clover they wouldn't be any bog hay fur beddin' down.

Chickens will come home to roost ef they don't git hung up in cold storage.

The fellers who hev no hard spots in life are gen'ly pretty soft specimens.

A settin' hen will stan' her ground, even ef she hez to lie down on it.

The lark enjoys life more than does the mud-turkle 'cuz his tendency is to look up.

The more ambitious the farmer the less he hez to say over the high cost uv livin'.

What's one man's meat may be all men's pizen ef it's been in cold storage long enough.

All the world must be a stage, considerin' people like so well to play all the time.

It is easy to say, "It will all come out in a wash," but it ain't allus true nevertheless.

The high cost uv livin' hez turned a good many men's attention to the low cost uv farms.

Whenever I think uv race suicide the pictur' uv an automobile goin' sixty miles an hour comes into my mind.

The farmer who ill treats his hoss or cow is knockin' off one uv the big profits uv the farm.

Take a lesson from the birds an' sing when the sun is shinin', an' when it ain't shinin' sing becuz you want it to shine.

Ev'rybuddy is down on the crow, an' I s'pose it's ez much becuz he ain't good fur nothin' fur fodder ez fur any other reason.

They is glory enough fur all uv us, an' room enough fur all uv us, an' love enough fur all uv us ef we go after it in the right way.

All kinds uv farmin' machinery are good things in their places, but a little machine fur makin' sunshine kerried in the heart is ez good an profitable ez any uv the others.

Maybaskets.

Maybaskets in the month of May
Are filled with love and cheer;
We ought to hang them, in our hearts,
All through the long, long year.

Great Age of Halley's Comet.

While Halley's comet has been identified as a member of our system for over 2000 years, certain characteristics of its orbit lead us to believe that it has been with us at least ten or perhaps one hundred times as long as that. According to all accounts, it was a magnificent object at the time of the Norman conquest in 1066. Its head was equal to the full moon in size, and its tail increased to a wonderful length.—From William H. Pickering's "The Return of Halley's Comet" in the April "Century."

Christianity began in a very small way—a baby lying in a manger, with some plain, simple minded shepherds coming in the night to look upon him. But the heavenly influence which started in the world that night has spread into all nations.—Wellspring.

Arsenite of Lime. A Warning to Fruit Growers.

Editor of Green's Fruit Grower: If you are planning to use lime sulphur as a summer spray instead of the bordeaux mixture particular care must be exercised in the use of insecticides. Experiments extending over three seasons and conducted by at least five experimenters have shown that arsenate of lead may be used with safety and effectively in lime sulphur particularly where it is used for the spraying of apples in foliage. Some investigators have suggested and some have even recommended the use of arsenite of lime with lime sulphur on account of its relative cheapness. The recommendations have apparently been made upon insufficient experimental evidence. There has just been issued from the Department of Agriculture at Washington, Bureau of Plant Industry, circular No. 54, on the Substitution of Lime Sulphur preparations for bordeaux mixture in the treatment of apple diseases. In this circular, Mr. Scott, the author, makes the following statements in regard to the use of paris green and arsenite of lime in some extensive experiments which he conducted in 1909.

He says, "The commercial lime sulphur at a strength of 1 to 30 in combination with paris green began to burn the foliage soon after the first application was made, and by midsummer the trees were almost bare. Arsenite of

It is the pace that kills. We live faster than men have ever lived in the history of mankind, says the Reverend Dr. Charles F. Aked, in "Appleton's." We live more than twenty-four hours in the day, more than seven days in the week. We burn the candle at both ends, and for fear the other man should get ahead of us light it in the middle, too. The world is shrinking under our enterprise. We shake hands across the Atlantic; we have a nodding acquaintance with the Antipodes. We live by nerve and brain. We live intensely. We live all the time. We live with every heart-throb. The very breezes as they play about us make music, or it may be discord, on our nerves. Of no people on earth is this so true as of the American people—and in this respect New York is more American than America. To the present writer it has sometimes seemed that after the process of evolution had reached a certain stage Mother Nature paused awhile to survey her handiwork, and, looking at the finished product in the old world, said: "My Englishman is, up to the present moment, the best thing I have produced; but I am going to try to improve on the work." So she proceeded to lighten the structure somewhat—whether with loss of stability remains yet to be seen. She made it a little



Getting water at Snyder's Spring at the home of F.S. Snyder, Woodbury, Pa.

lime was also used with the 1 to 30 solution, and the results were disastrous. The foliage was burned to a crisp and the fruit badly scorched by the first application. Even the new twig growth was killed to a considerable extent.

"According to the information at hand arsenate of lead is unquestionably the poison to use with the lime sulphur mixtures. Instead of increasing the caustic properties of the mixture, as at first feared, it apparently has the opposite effect to some extent and does not lose any of its insecticidal value by reason of the combination.

"In all the experiments the combination of paris green and the lime sulphur solution proved to be quite injurious to apple foliage, and in the Arkansas work the combination of arsenite of lime and lime sulphur was exceedingly injurious."

Growers are therefore warned against the use of anything but arsenate of lead in lime sulphur for the general spraying except in an experimental way.—H. H. Whetzel, Plant Pathologist, N. Y. State College of Agriculture.

Farmers Lose Money Through Sugar Beets.

Many fertile farms have been largely devoted to growing sugar beets. The farmers, it is alleged, have had a contract with a factory by which the farmers would receive cash for their beets. Last fall the crop was harvested and delivered at the factory but payment for the beets, it was claimed, was delayed from time to time. Finally it is stated that the machinery of the factory was removed to a distant part of the country. Then the farmers sued the sugar beet factory for money due for beets delivered but so far they have not been able to collect anything, and the farmers feel as though all that they have invested in producing sugar beets the past year is a total loss. Some of the farmers claim to have lost from \$500 to \$1000. The lesson is that farmers should know with whom they are dealing and should make inquiries as to the responsibility of sugar beet factories or canning houses or other companies with which they make contracts.

The first sure symptom of a mind in health is rest of heart, and pleasure felt at home.—Young.



Attractive home of Wm. Hudnutt, a western New York farmer at Middleport, N. Y. There are evidently four members in the family—the dog, the sheep, the man and his wife.

dad, the good Haroun-al-Raschid. One of the viziers accosted him, saying, "Rejoice, O Bahlul, at these good tidings! The Prince of the Faithful has made thee ruler over apes and swine!"

"Take my orders, then," quickly retorted Bahlul, "for surely thou art of my subjects!"

Again, there is a spice of national hatred in such a tale as this: A Turk, says Jami, being asked which he would prefer, plunder in this world, or Paradise hereafter, made answer thus: "Let me to-day engage in pillage and carry off all that I can find; to-morrow I shall be willing to enter hell fire with Pharaoh the persecutor!"

For some reason or other, the Man of Jam seems to have a deep detestation of school-teachers, if one may judge from the many sharp jests he directs against them. For example, this: A teacher, he says, whose son had fallen ill and was at the point of death, bade them send for the washer of corpses to wash his son. "But," they objected, "he is not dead yet!"

"Never mind," said the teacher; "he will be dead by the time they have finished washing him!"

Again they said to the son of another teacher, "What a pity thou art such a fool!" "Else were I no true son of my father," he replied.—Charles Johnston in "Harper's Weekly."

Sensible Gertie.

Louis Gordon was all smiles.

"You appear happy, Mr. Gordon,"

said a reporter. "May I inquire why?"

"May you inquire?" repeated Mr.

Gordon. "Didn't you hear about it?"

Of course, how could you? But surely

she is a chip of the old block. O, the

man who gets her gets the finest girl

in the country. God bless her."

The news spread that Miss Gertrude Gordon was about to marry and the proud father was asked to tell all about it.

"It was this way," he said. "Of course, you all know about the big weddings I gave each of my five married children. There was never anything like the Gordon weddings. Well, this morning Gertie comes to me and this is what she says to me:

"'Pop,' she says, 'How much does it cost you every time one of the children gets married?' She meant for the hall and the entertainment. Well, I figured it out and told her \$6000.

"'Pop,' says that smart girl to me, 'how would you like to make \$1000?'

"'You're on,' says I to Gertie. 'Show me how.'

"'Pop,' she says, 'I tell you. You give me \$5000 and you keep the \$1000. I will get married quietly in the house and you don't spend the \$6000.' What answer did I make? What a foolish question! I told her to go ahead."

Miss Gordon is to marry Adolph Rothenberg, a hat manufacturer, March 2, in her father's home, 2026 7th avenue.

"I tell you," said Gertie to me, 'how I think we can spend the \$5000,'"

Gordon continued. "If my husband buys goods on thirty days' notice I can pay the cash and thus make the discount."

Then she said that after five years they could have a fine tin wedding in a hall. Now do you wonder that I am happy with such a sensible daughter at home? I tell you we are proud of her."—New York "World."

Controlling Pear Blight.

A southern Illinois correspondent of the "American Agriculturist" says it would seem that the wise course would be to discard absolutely all the older varieties of pears that are subject to blight, and to grow only hybrid varieties which will resist blight. This correspondent says his annual loss in pears from all causes, including blight, during the past three years, has been less than 3 per cent.

Last spring whenever blight appeared in his orchard he cut away, not two or three inches below the infection, but to the beginning of the year's growth, and he did not observe a single case where blight came as a result of infection in cutting. The knife was wiped on a cloth saturated with carbolic acid after each tree.

A Good "Road-Agent."

How he stumped a Missouri county in favor of "rock roads" is told by Charles Dillon in the issue of "Harper's Weekly" for April 9th. "In the country to which I had been assigned," he writes,

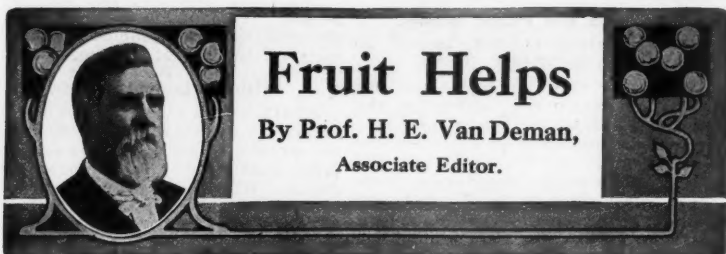
"the people rear back and strike out with all their feet at once and froth at the mouth at the mention of bonds, taxes, and automobiles. Also they suspect you of trying to get their signatures to a mortgage for a lightning-rod or a washing-machine, or they fear that you intend to ask them to renew their subscription to the paper." After one or two unhappy discussions, every man he hailed knew all about him and had his answer ready. "If I encountered a farmer on the road, he drove by as if he had been sent for a doctor. One man told me I resembled the county assessor, and it was weeks—after I had seen that official—before I knew what a body blow I had been dealt."

The Joke as Persia Sees It.

An exceedingly ugly man, says Jami, was once in the mosque, asking pardon of Allah for his sins, and praying to be delivered from the fires of hell. One who overheard his prayer said to him, "Wherefore, O friend, wouldst thou cheat hell of such a countenance? Art thou reluctant to burn up a face like that?" Once again, the story-writer tells us that a certain person with a hideous nose was once on a time wooing a woman. Describing himself to her, and trying to make an attractive picture, he said, "I am a man devoid of lightness and frivolity, and I am patient in bearing afflictions!"

"Aye!" said the woman, "wert thou not patient in bearing of afflictions, thou hadst never endured thy nose those forty years!"

All of which is more witty than kind. Hardly less sharp is this next tale: Bahlul, we are told, once came into the presence of the famed Caliph of Bag-



Fruit Helps

By Prof. H. E. Van Deman,
Associate Editor.

The plan, as here stated, of buying large tracts of land in the southern states, dividing them into small tracts and selling them to settlers from the north is all right in some ways but may not be in others. What any region needs is many small farms on which the owners live instead of few large ones on which tenants are almost sure to live, mainly. The opportunities in the south for this sub-dividing large tracts are great and some of it is being done with satisfactory results and some not so satisfactory. There is both good and poor land to be found in the south as there is everywhere and one should be fully aware of what sort he buys, whether he is to live on it or not, but especially if he is a man of moderate means and intends to make it his home. There are millions of acres of land that has been lumbered off, that is, the most valuable timber cut for lumber and the land then practically abandoned. Some of it is naturally fertile, having been covered with oak, hickory, gum, ash, elm and other deciduous trees, but a large proportion was in pine timber. The character of the soil covered by these two classes of timber differs very materially. The hard wood land is usually a clay loam with considerable humus but the pine land is usually very sandy, and has but little humus in it. These "cut-over" lands usually sell very cheap and in some cases they are sold to the state for taxes. The pine lands are cheapest of all and indeed they well may be so, for much of them are exceedingly poor in the elements that go to make a fertile soil, which are potash, phosphorus, nitrogen and humus as well. Some of the pine lands in southern Georgia are much better than the average. On a tour of inspection there a few years ago to determine their value for agricultural and horticultural purposes for a New York party who owned some 300,000 acres there I was quite pleased with the lay of the land, the soil and subsoil. The land was rolling and there was on almost every hundred acres a good building site and timber enough left by the lumbermen for farm use. Good water was to be found in wells at reasonable depth, from twenty to forty feet, and there were streams every few miles.

The region mentioned by the present inquirer, I have only passed through on trains occasionally. It is far enough south to be rid of the severe cold of the winters and the soil is fairly good but not rich. As the writer states, much of the land has been farmed, and mostly in cotton, for many years past. This has taken out a large part of the natural fertility. The present state of this old land is just right for being saved from destruction, for when it gets so low in production that the crops will not pay their culture, and there are plenty of them of that kind, the land is abandoned to the tender mercies of mother nature. She covers it with weeds, brown sedge, bushes and young trees that come up from seeds sown by the wind. The rains wash it into gullies of all sizes. Some of them on rough land are deep and wide enough to hide a team, wagon, driver and all. There are a very few cleared fields in a good state of till because the system of farming that has been followed from the time the land was first cleared has been, with few exceptions, to get all out of it that it would give up and put little or nothing back. The farmers have been drawing checks on the deposit that nature made, and that deposit is about exhausted. But good farming will bring the land back to a productive stage. The cowpea is the main factor in building up the soils of the south. The persistent and intelligent use of this grand gift of nature will build up any soil in a climate where it is suited, and the warm, long summers of the southern states are just right for it. Good crops of peas and vines may be grown and the land be the richer for it, year after year.

I am not meaning that the region and the land in question to be exploited by the Chicago man is not suitable for making homes for northern people who want to move south for various reasons, but I do say that there should be the most careful examination into this or any other scheme of

the kind before taking steps that cannot easily be retraced. Moving from an old home, where there are associations and family ties that should be only broken up for the best of reasons, is a very serious matter. There are reasons that will justify it and there are land schemes that are fair and square, and this may be one of them, but make sure of knowing all the bottom facts before going into any of them. Go and see the land and all the other facts that are connected with the whole affair. There are several very important points besides having good land to work on. There should be good transportation for what is to be bought and sold. The school privileges are of greatest interest, whether one has children to be taught or not, for upon this depends much of the state of society of the neighborhood. Who are to be our neigh-

silent but certain evidence of an unwise attempt to grow fruit where it was destined not to succeed. Those who planned the scheme were greatly mistaken in their plans. What might be the outcome of the plan suggested in the inquiry that heads this article is a very serious question. "Apples," which is a fruit suggested, would certainly not pay there. The locality is far from any good apple growing region. Peaches may do well. Berries of several kinds may prove satisfactory, especially the strawberry, dewberry and blackberry. The varieties will have to be tried out and nothing else will prove which are best. To guess and then plant largely at first would be folly.

There are millions of acres in all the southern states, now practical wastes, that will, in the course of time, be covered with beautiful and prosperous farms. But it will take many efforts to find just what to grow and how to handle the situation. I know of one most fertile region, located in northern Louisiana, on the borders of a charming lake of clear, deep water, close to good transportation, that is now lying in a state of practical neglect. The land is some of the best of all the alluvial deposits of the Mississippi river. The location is not low, although the land is quite level; nor is it subject to overflow. Thousands of acres are cleared and have been tilled in cotton and other crops for many years, as is now being

I shall be pleased if you will either answer the foregoing questions, either by letter or in the Fruit Grower, in time for me to use the information the coming season—C. G. Hulse, New York.

Reply: There is no doubt of the value and quickness of effect of nitrate of soda on strawberry plants or any other crop that needs stimulation. I have used it on several crops during the growing season that showed the effects within less than two days of the time of application. But it is like fire, it must be used with great care and knowledge. The nitrogen in this natural chemical deposit, which was doubtless made for the use of man in growing crops, is very easy of liberation and this should be fully understood by all who use it. The soil moisture will at once set it free and change it into a form that will be available plant food. The application should not exceed 200 pounds per acre at any one time and sometimes this amount should be divided in two lots and be applied with an interval of two weeks or a month. The rains will dissolve the nitrate of soda and carry the plant food from the surface to the roots but working it in with a cultivator as soon as applied is the better way.

There are several excellent books on chemical or commercial fertilizers. The U. S. Department of Agriculture at Washington has a farmer's bulletin, No. 44, which treats on this subject. The several state experiment stations have something of the same kind and all of these may be had for the asking. The several rural papers are agents for books that treat on fertilizers and they can be had at reasonable cost.

C. A. Green: Some time ago I saw an article in a certain publication saying that if water sprouts were all removed from trees it would finally kill the tree. As we have been taking the advice of Green's Fruit Grower for many years, I would thank you to tell me the actual result of such treatment to the trees. Please answer through Green's Fruit Grower.—L. H. Barger, Ohio.

Reply: What are commonly called water sprouts are rank growing shoots that come out from the main branches of the trees, and usually, where severe pruning has been done and nature tries to replace the missing branches. However sometimes such sprouts will come where there is no easily noticed reason for them. To keep them cut off is no damage whatever to the tree, provided branches enough are left to fill out the head of the tree properly. There must be a normal and sufficient amount of foliage on any tree to maintain its vigor, for the leaves gather carbon from the air and digest the different plant foods that are gathered in by the roots, thus performing a very important part of the economy of tree life. Some who do not fully understand the facts about plant growth think that there can be too much foliage for the proper development of a tree but this is a mistake. The more foliage there is the more food is gathered and stored, or in other words, the more growth is made. This, sometimes, may not be conducive to fruit bearing and in this way be a disadvantage, but usually, abundant and healthy foliage is what is needed.

Mrs. M. D., of Cape Cod, Mass., asked some questions some months ago that did not get answers then because of there being too many others asked at that time.

She has a Baldwin apple tree that is about eighteen years old and does not bear well she thinks because it has been neglected in the matter of cultivation, but is not sure that the sod should be broken up about it. Borers were found in the trunk near the ground.

This tree and any others under similar conditions should have the sod plowed or dug up or a good coat of some coarse mulch put on the ground as far out as the tips of the branches extend. In any case the mulching will do good. The borers that infest apple trees near the ground live in the trees two years and come from eggs that are laid by a large beetle. It is not a very difficult matter to keep them out if the trees are carefully examined at least twice a year, in springtime and again as cool weather begins in the fall. Another examination in midsummer is very good, for the young grubs are then just getting large enough to be found. A stout, sharp pointed knife is the best tool to dig them out with and a garden trowel to remove the soil at the base of the trees so the knife can be used. A stout, springy wire is useful to run into the holes where the large grubs have gone also comes handy. No time should be lost now in looking carefully at the apple and quince trees for these round headed borers. In the west the flat headed borer is more common.

This lady has a Chinese plum tree, of the species *Prunus Simoni*, that she



A cranberry bog at Osceola Pines, East Bridgewater, Mass. This bog was set out about the 15th of May, 1909, and the picture was taken September 1st the same year. They are of the Howe variety. This photograph was sent by Geo. E. Wolschendorf.

bors means much to any thinking person. If there is a colony of any considerable size there may be enough people of congenial and progressive ideas to control the schools, churches, local political and municipal affairs to insure good education and general moral behavior. There are cases where the most unhappy conditions of this kind exist and they are to be prevented rather than try to mend them afterwards. Old fogies who have always been in control like to continue in power and often take delight in annoying, and if possible, over-riding those who wish to progress. It is better to locate in the uninhabited prairie or the unbroken forest and begin in absolutely new territory than among a thinly settled population of old fogies.

The growing of fruits as a business is all right if the right location as to soil and climate is selected. There are many such places in the south and some of them have been occupied by northern people with good success. Florida was settled in this way, very largely, since the Civil War, and yet there have been many failures there, as elsewhere. It depends largely on the wisdom used. A notable case is that of Southern Pines, North Carolina. The original colony there was composed of people from the north who knew practically nothing of the land and what it was good for. It was the poorest of the poor "piney woods" soil and almost nothing but pine trees and scrub oak grew there naturally. Many of the people gave up in despair. A few staid from choice and some were too poor to get away. A few grape vines were planted in the yards and gardens. They grew and bore beyond expectation. In due time large vineyards were planted and are yet flourishing. Peach and dewberry culture became popular in about the same way. But the fertilizer bills are enormous and the crops are not always profitable.

Another colony was started in northern Alabama and hundreds of acres of grapes were planted, but they did not pay and the remains of these vineyards may be seen from the cars that are

done. But there are mostly hovels built along the beautiful shore, in which there are living the most degraded of the negro race. There are a few plantation houses, occupied by white people, but some of them are little better than the negroes. If all the property fronting on this lake was bought up by a single wealthy person or a company of the right kind, and then divided into small holdings, each fronting on the lake and extending back into the native forest, which is about half a mile distant, there might be one of the loveliest and most prosperous rural regions made in all the country. The climate is mild and healthful. Water and timber are abundant. There should be a pecan orchard on each tract; for this tree is a native and the choicest varieties will flourish there equal to anywhere they have been planted. There are no more profitable trees grown in the world and they will increase in profit for a century and then be only in their prime. Figs, peaches, American and Japanese plums, berries and a large variety of vegetables may be grown in abundance. Farm crops, live stock, poultry, bees and all things needed can be raised to profit. There are fishes by the million in the lake and game in the fields and woods in abundance. All that is needed is the people to live upon and enjoy the land.

Answers to Inquiries.

Dear Sir: I have three acres of strawberry plants for fruit, part of which are Johnson's Early and Sen. Dunlap. What I would like to know is how I can gain a few days on my early berries as it is easy to dispose of berries here early in the season even though the quality is not extra fine. I remember having once read an article in the Fruit Grower on the results obtained from the use of nitrate of soda and also phosphates but have mislaid the issue. Where can I obtain a work on the results obtained from the use of different chemicals in patent fertilizer for the various farm and small fruit crops? Also from the use of stable manure under various circumstances?

wishes to keep in a good state of growth and asks if it should be left in sod or cultivated. By all means dig up the sod and mulch about it with coarse material that will keep down weeds and grass, hold the moisture in the soil and enrich it by decaying and finally being dug in.

Another letter of inquiry that has been left over from last year is from Miss G. B., of New Hampshire. She has cherry trees that have grown too high for easy gathering of the fruit and wants to know if they may be safely cut back during the summer.

This would check their upward growth and have no serious results if the cutting is not too severe. As a rule cherry trees are pruned very little and for two reasons; they do not need much and rarely any pruning, and they are injured by such as would not hurt apple and most other fruit trees. Any stroke at the life of the tree will shorten its ability to bear fruit.

She has some grape vines and asks "if pruning them back in August will not increase the growth of the grapes?" This would be a very bad plan. It would cut short the vigor of the vines and decrease their ability to feed the grapes and make them large and well flavored. I have seen grapes injured in flavor by this very thing.

She also asks if trimming red raspberry bushes as soon as the fruit is off will not strengthen the canes for the next year's crop? This has been tested out by many growers and the prevailing opinion now seems to be to cut out nothing from the new canes, but the removal of the old, bearing canes is an advantage.

She also asks about wistaria vines that have been grown from seed, how to treat them, etc. They may be trimmed into bush form and will bloom in about four years, or, they may be trained to grow as vines and will soon make much shade and come into bloom in about the same time.

B. A. P., of N. Y., asks if pear grafts set on "wild thorn apple trees" will bring good results.

Reply: No they will not do well. The union is bad and will finally prove a failure, although they will grow and often begin to bear fruit. I have tried this to my complete satisfaction. There is too diverse growth of the wood. Pear grafts will do about the same but are still more ungenial.

A subscriber in Central Mississippi has asked what fruits to grow there and I have no doubt the intention is to grow them for market.

Reply: My advice is to make the main effort with the peach and berries. Not many orchard fruits will succeed well there, but the peach is at home in that region if the right varieties are grown. The soil that suits them best is one of a mixed sand and clay formation and with a reasonable amount of humus in it. It should be well drained and not low, flat and sticky. The very best soil on the farm is none too good to be set to peaches or other fruits and they will pay for its use a larger return than any ordinary farm crop.

The variety above all others that usually brings the best return for the outlay, although it is not the best in quality, is Elberta. It is a large, yellow freestone peach, beautiful in appearance and of fair quality. Some think it as good in quality as any variety but they do not know what a first class peach is like. There are many other good varieties that will do well in Mississippi which are the Belle of Georgia, Hiley Carman and Mamie Ross.

Of the berries the strawberry is the main dependence. There have been thousands of acres grown with good profit in Mississippi. About Madison the strawberry has long been grown extensively for market and the varieties used have ranged about as in other sections. I am not fully aware of the varieties that are now the most popular but understand that Arbina, Dunlap, Excelsior and Johnson are considered among the best. Dewberries also may be grown with profit to ship north very early, for they begin to ripen before strawberries are gone and yield abundantly. Lucretia and Mayes are the best varieties. In some parts of the south they are grown quite extensively.

H. E. Sandman.

Ambitious Hens.—The hens of Meredith, N. H., seem to have heard that eggs are scarce. One of them is reported having laid an egg containing four yolks, each covered with a soft shell, all inside the outer shell, which was also soft. Another ambitious hen at York, Pa., laid an egg described as three times the size of the ordinary egg, measuring eight inches in length and two inches through the centre.

The Post Office, Our Mutual Express Company.

By Hon. William S. Bennet, of New York, in the House of Representatives.

From the foundation of our national government, the people of the United States, through their representatives in Congress, have always determined the scope of their postal service, the pay of their mail carriers, their own postal rates; and from the first they seem to have provided for the postal transport of merchandise in very small sealed parcels at very high rates—by the act of 1792, 24 cents an ounce for distances up to 30 miles, higher rates for greater distances. In 1810 they fixed the postal weight limit at 3 pounds, and it so remained for many years. In 1863 postal rates were made uniform regardless of distance, and since 1863 Congress has definitely provided for the transport of merchandise in unsealed parcels, but still with a weight limit so low and rates so high as to be practically prohibitive.

In the old era of household industries when the peddler, with his pack on his back, or driving his own team, was the chief agency of commercial intercourse, these postal limitations worked little harm, but their continuance in our day, when every industry needs a continent for its development, is no longer endurable. The common welfare demands the widest possible extension, the most efficient and economic administration of our great mutual express company.



The above photograph will give our readers some idea of the activities of a nursery in early spring, when you are waiting for your trees to be shipped perhaps hundreds of miles away.

In its report of January 28, 1907, the Postal Commission of the Fifty-ninth Congress declared that: "Upon the postal service, more than upon anything else, does the general economic as well as the social and political development of the country depend." And yet the United States merchandise post of today is limited to 4-pound parcels at rates: Sealed parcels, 2 cents an ounce, 32 cents a pound, with no insurance against loss or damage unless registered; and unsealed parcels, with no insurance under any conditions.

Under growing differentiation of industry there is a steadily growing demand for a door-to-door express service of parcels ordered by telephone, telegram, or by mail. The business can not be done by private express companies to the public satisfaction. Their machinery does not reach the rural districts. An extended postal service is the only public choice.

As long ago as December 6, 1898, the Merchants' Association of New York issued the following statement to the merchants, manufacturers, and shippers of the state of New York: "A very large part of every dollar paid by you for express charges is exorbitant and exacted to pay a monstrous profit to an unrestrained monopoly."

Many of you are compelled by present conditions of competition to use the express service on a large part of your shipments, and to pay express charges which are from 300 to over 20,000 per cent. of corresponding freight charges. The express charges on many classes of goods average from 5 to 15 per cent. of the value of merchandise transported.

These are the charges that you pay. But many of your strongest competitors are favored by discriminating rates and pay much less.

The express companies are now uncontrolled by law and you have no recourse against exorbitant charges; you must ship by express and must pay whatever the express companies see fit to charge.

Indiana Horticultural Report.—This valuable report is now ready for distribution. It is bound in cloth, 154 pages, free to all who pay \$1. the annual dues of the society. Address W. B. Lloyd, sec'y, Kimmunity, Ills. It is a valuable addition to any fruit grower's library.

Recreation and Public Morals.

Written for Green's Fruit Grower by Warren H. Wilson, Ph. D.

The farmer must not blame the city for the sins which were learned in the dull and uninteresting life of the country, and are practiced in a larger way by the countrymen who make up the bulk of the Chicago population. One reason why Chicago is so dull and sordid is in the fact that the controlling majorities in Chicago were brought up in country towns where there was no sympathy with the young, and no conception of the moral value of play and recreation.

The general opinion prevails in America that morality is a product of work. So it is for grown men, but a higher morality is learned in play than in work. The American population does not need to be taught to work. The proportion of tramps and idlers is small. A greater problem in America is the torpid and ill-trained conscience of the industrious, dull-minded, over-worked mechanic, farmer and business man.

It is in play that the human being expresses himself. He is hired to work, but in his recreations his own preference is expressed, and his own spirits burst forth to do their own will. For this reason the whole of the process of amusement and recreation is highly moral in its character. Every action of the play-ground or of the ball-ground is free and voluntary. It is the bursting up of native human energies which

people. It is not too much to ask that the country church should be the promoter of this moral training school.

Riches in Red Apples.

Editor Green's Fruit Grower: Red apples are in demand on all markets of the world. Select specimens are worth more than any of the choicest citrus fruits. We hear recently announced the sale of a box of prize-winning red apples for \$52.50. That was considered the highest price since the famous Hood River beauties were received by the royal families of Europe and gave Oregon fame as an apple producing section. Now comes the report that a box of Winesaps containing 112 apples has been sold in Chicago for \$67.50, being more than 60 cents each. They were blue ribbon fruits.

Apple growing has become one of the most profitable forms of modern orcharding. Irrigated lands, planted to good market varieties of red winter apples, sell for \$1500 to \$2500 an acre. Business men invest in orchards because they bring better returns on the money than other branches of financing. Many professional men leave their old haunts and engage in apple growing for recreation and profit. The new life adds to their prospective years of usefulness on earth and makes possible the maintaining of a bank account, with the balance on the right side. There is romance in the apple orchard that carries heroes to financial and physical success.

There are several varieties of good apples. Every class has its special merits and personal advocates. In some districts Winesaps are outclassed by Rome Beauties, and in other sections the Ben Davis and their close relations, the Ganos, are held in contempt. But the apple grower plants his orchard for the purpose of getting cash returns in as few years as possible, and the soil, climate and transportation must be considered in figuring on the probable annual income.

Many apple growers have discovered the value of proper food for young trees and those in bearing. In districts bordering on the Pacific coast color was lacking in the fruits and the growth did not insure uniform specimens for packing. The growers were advised to try potash fertilizers as a remedy for the noticeable impediments to successful orcharding. A top dressing of a complete fertilizer, containing nitrogen, 2 per cent., potash 12 per cent., and phosphoric acid 8 per cent., gave desirable results. In one instance, in the Puyallup Valley of western Washington, the application of potash in connection with nitrogen and phosphoric acid, increased the yield of fruit, intensified the color and added to the keeping qualities, giving an income of approximately one-third more than from former years of apple growing.

There is no danger of an oversupply in the apple markets of the world. Consumers are calling loudly for more fruits and they have the money to pay whatever prices the fruit growers may demand. With more attention to the selection of varieties, planting and cultivation of young orchards and the spraying and fertilization of bearing trees, success is certain, provided the methods of transportation are not too expensive. There is a limit to the distance apples may be hauled for competitive marketing. Every specimen must be packed in such a condition that when opened and placed on sale, it will be without spot or blemish. Perfection can be attained through a close application to the study of nature and her needs in holding the necessary amount of plant food for complete development of quality and quantity of fruits demanded by the careful buyers of the day.—Joel Shomaker.

Soil Must Have Humus.

A humus-filled soil is a vast reservoir for holding water. Keep the land full of vegetable matter by the use of stable manures and plowing under legumes and preserve the dust mulch in planted crops by frequent shallow cultivation, and the losses from long dry spells will be reduced to a minimum.

Professor King, of Pennsylvania, emphasizes the need of humus: "By having a deep soil well filled with humus, we have a soil that is retentive of moisture and acts like a sponge to hold it."

No Game Like Baseball.

There is no game that can steadily attract so many spectators during the entire course of its season as baseball. There is no sport that gives an opportunity for so many of our younger boys to enjoy exciting, skillful and developing exercise. In fact, to put it concisely, there is no game so well adapted to the American boy and man.—From Walter Camp's "The American National Game" in the April "Century."



If I knew I were to die to-morrow, nevertheless, I would plant a tree to-day.—Stephen Girard.

Origin of the Apple.

Orchardists all over the continent will be interested in the research work just completed by Ren H. Rice, secretary-manager of the National Apple Show, Incorporated, showing that the so-called "wild apple," or "wild crab," from which many of the present standard commercial varieties have sprung, were wayward descendants of trees originally imported from England and other foreign countries in the eighteenth century, says "Southern Orchards and Homes."

Mr. Rice has compiled data, tracing the seeds from their habitat in foreign soils to these shores, also the wandering of the trees from the path of civilization, reverting to savagery, and then brought to the present-day perfection, as to color, size and flavor, after years of toil and study. Of the contributory factors, the process of cultivation was not of sufficiently long duration nor was it complete, and, as a consequence, after a few years' neglect, it was natural for the fruit to return to its normal state.



"During revolutionary times and the days of the Indian wars, when thousands of men were called to bear arms, many farms were permitted to run to waste and weeds. In numerous instances the isolated homesteads and even settlements were attacked and destroyed, the occupants slain, the buildings sacked and burned and the stock scattered when not stolen. Thus, a few years completed the transition from pioneer husbandry to utter ruin and chaos.

"Frequently these settlements were the outposts of civilization, situated as they were on the very edge of the wilderness, and, in the course of a few

MEMORY FOOD

A Case where Memory was Strengthened by Grape-Nuts.

Food that will actually help the memory as well as agree perfectly with a delicate stomach is worth knowing of.

A good wife out in Iowa who did not know which way to turn to get food that would agree with her husband, who was left in a weakened condition after a serious illness and could scarcely retain any food in his stomach, was one day induced to try him on Grape-Nuts, the famous ready-cooked breakfast food, and from the first he began to improve rapidly. In three months he had gained 30 pounds.

She says that his stomach has recovered so completely that he can now eat any kind of food.

She mentions the boy of an intimate acquaintance, who was so delicate and thin that his appearance was pitiable and he had no appetite for any ordinary food. He was put on Grape-Nuts and liked the crispness and sweetish taste of the new food and took to it. His improvement began at once and he is now a healthy, plump boy.

"I know that Grape-Nuts will do more for weak stomachs than any medicine. The claim that it will build up and strengthen the brain has been proven to my certain knowledge. Sister, who writes for the press, and is compelled to memorize a great deal, has been using Grape-Nuts and says she is surprised at the result. There is a marked improvement in her memory and the brain works more perfectly and with better results."

Read "The Road to Wellville," found in pkgs. "There's a Reason."

Ever read the above letter? A new one appears from time to time. They are genuine, true, and full of human interest.

years, rank weeds pushed their heads through the rotted boards and logs, pine, hemlock and maple growths sprung up in the clearings and wild things scampered unmolested over the ruins, which were rapidly accumulating moss and lichens. In a word, the wilderness had stretched forth its hands and claimed its own.

"The young orchards, which, with the poplars and other trees, served as wind-breaks, were quickly surrounded and outstripped in growth by the native woods, the tangled underbrush choked the tender trees and the fruit reverted to the wild and free manner of the pigeon berry and beechnut."

"Wild apples, so called, had a peculiar charm of their own, largely because of their spicy flavor. Though barred from the tables of gentle folk and the marts of trade, they were sought by fully as interesting if less exacting consumers. The blanketed redmen used them as staples of diet and the pioneers of the backwoods and the frontiersmen often stepped off the trails to obtain a store. The settlers of more peaceful days found them a pleasant surprise in a zone not prolific of fruits, and bear, raccoon and porcupine also knew them as an excellent preparation for the long sleep of winter.

"When the yeomen returned from the wars to resume the cultivation of the soil, many farmers set themselves to redomesticating the apple, and in this entered the process of selection and rejection as practiced by the foremost pomologists and botanists of the present day. Trees were cleared of the underbrush and pruned, and scions were developed and pruned in turn, until after much patient toil, as long in duration as the period of retrogression had been, the wild fruit once again became the apple of civilization, and with this came its development as a commercial product, which is destined, so far as the northwestern states and provinces are concerned, to rank with the wheat industry in a very few years."

Mr. Rice shows in his compilation of data, bearing on the growing of commercial apples, that the industry has not kept pace with the increase in population in the United States and Canada, from the fact that the entire crop this year, estimated at 28,000,000 barrels, is many barrels less than the production in 1896, when growers in the United States harvested 67,070,000. Twenty-seven million barrels of apples were harvested in the United States last year.

The explanation of this condition lies scattered over the broad acres in the New England, eastern and middle western states, where apple orchards, never regarded as serious features of the farms, have fallen easy prey to neglect and resultant pests. In many instances the trees have been felled to supply manufacturers with materials, while in other localities entire orchards have been chopped out to afford room for more profitable crops.

As there is no substitute for the apple, this would mean nothing less than a famine were it not for the orchards in the west, where an immense territory has been dedicated to fruit production, and with the millions of trees planted annually will make this the orchard of the world.

Aphids or Plant Lice.

Plant lice are sucking insects which damage trees and other plants by injecting a poisonous saliva, and then sucking out the sap. The leaves upon which they live curl until they form protecting homes within which the pests are safe, and cannot be reached by any spray liquids. Bordeaux mixture does not affect them as it is a fungicide. The arsenical poisons do not kill them for they are for the chewing insects only.

The plant lice are to be killed by spraying at the right time, which means shortly after the buds burst or before the leaves have curled, with the right material, which is a good contact insecticide, strong enough to kill the pests but not strong enough to injure the leaves. For this (1) one pound of whale oil soap in six gallons of water

Spraying Outfit? Here's a REAL BARGAIN!

Besides Furnishing Power for Spraying, This Mighty Engine Does a Hundred Other Tasks!

Here's a combination power-spraying outfit and PORTABLE POWER PLANT—at the price of the usual power-spraying outfit alone!

No need to pay BIG money for a power-spraying outfit since the versatile Fuller & Johnson Farm Pump Engine is on the market!

At insignificant cost get the Fuller & Johnson Spraying Outfit—highest grade manufactured, and guaranteed to give satisfaction—a characteristic product of the F. & J. Mfg. Co.

FULLER & JOHNSON SPRAYING OUTFIT

Dodge the Heavy Outlay of Money for Spraying!

Every grower of fruit—every truck farmer—every farmer of any kind must have an engine to do the heavy work! But where's the sense in buying two kinds of power plants when the Fuller & Johnson Spraying Outfit includes a PORTABLE power plant that does the work of both! Spraying is necessary—but it takes only a few days each season. So the thing to

do is to avoid the heavy investment. And the Fuller & Johnson Outfit, with its mighty little engine that works at other tasks besides, is the solution!

Runs 6 to 16 Nozzles! This spraying outfit keeps a pressure of 140 to 200 pounds—ample for every need!—powerful enough to run from 6 to 16 ordinary nozzles. Just set in into wagon box or truck and put it to work.

Send for Special Spray Bulletin

It is yours for the asking—a postal will bring it—send the postal today.

Read Combination Offer

Write today for name of nearest dealer and get this bargain—a combination power-spraying outfit and Portable Power Plant—at the price of the usual spraying outfit!

If you already have a Farm Pump Engine we can supply you with our matchless spraying outfit, to which you can quickly hitch the engine. If today you have a spraying outfit our engine will run it for you! Easy to attach it.

Fuller & Johnson Mfg. Co. Dept. A

Madison, Wis.

Established 1840

(103)



should be used, or (2) about eight percent kerosene emulsion, or (3) a stronger soap, or (4) a very strong tobacco decoction. It must be so applied as to come into contact with the bodies of the pests, or they will not be injured. Therefore, those within the curled leaves are safe as far as spraying is concerned, and the leaves containing them should be picked off and destroyed by burning or dropping into oil.

The apple aphid is by far the most commonly reported pest at this time of year. However, it has reached its worst and will soon be leaving the apple leaves to migrate to the roots of grasses and grains, where it spends the summer. In fact, many leaves now show only its cast skins. The appearance is worse than the result, as the leaves are deformed but not entirely destroyed, and as treatment at this time of year for the badly curled leaves is out of the question, it is not necessary to attempt to give it. Where, however, aphids, jumping plant lice, leaf hoppers, and other sucking insects are present, the remedy consists in getting one of the contact insecticides named above to come in touch with the body of the pest. This can be done by spraying or by bending the twigs containing the pests so that they can be dipped into pans holding the liquid, or by dipping bunches of twigs or whisk brooms into the liquid and flipping it against the pests in a fine spray. This communication is intended to be an answer to hundreds of inquiries on this topic now being received by the Division of Zoology of the Department of Agriculture, State of Penn.

Another receipt that will control aphid or plant, lice is as follows: Take quassia wood, two and one-half pounds, soaked over night in ten quarts of water and well boiled; then strain through a cloth and place with 100 quarts of water in a petroleum barrel, with five pounds of soft soap. The mixture is then ready for sprinkling on plants infested with lice. If the pests reappear repeat the application. The solution can be kept in good condition during the entire season by keeping the barrel covered.

The Snow apple reaches its highest perfection in St. Lawrence, Franklin and other northern New York counties and the Lake Champlain valley.

Evolution of Japan's Cherry Blossoms.

"The evolution of the cherry blossom from the simple, single, little, wild mountain flower to a great, wide-spread, two-inch blossom, as big as a cherokee rose, and to great rosettes of 'many-fold,' 'hundred-petal' and 'thousand-petal' flowers, is as amazing as anything in the necromancy of Japanese gardening," writes Eliza Ruhamah Scidmore in her story of "The Cherry Blossoms of Japan" in the March "Century."

"Beginning with the stock of the wild mountains, or Yoshino, cherry, the gardeners grafted the shoots of the flowering varieties close to the ground, then enlarged the petals, changed stamens to petals, and multiplied the petals. These they curled in cuplike forms beyond the possibilities of a plum blossom, and, beside the one indentation of the traditional heart-shaped petal, cut deep notches like a sparrow's beak, or made serrated edges like the petals of a pink or daisy.

"They called the latter flower the 'little chrysanthemum.' They curled and broadened the stamens, stood them upright like the sail of a junk, and in some cases left two pistils of pale green in the heart of the rosiest flowers as a charming color contrast."

Ripe Cherries.

You know how they delight every child, every man and woman who sees them growing upon the trees in your yard. We grow roses for beauty, but they are scarcely more beautiful than ripe cherries. Perhaps you do not know that one-year-old sweet cherry trees are popular through the country. If you had bad luck in planting cherry trees try the one-year-old trees. People are getting their eyes open to the great value of cherries for market. Train the tops of the trees low so that you can pick them with a short ladder. While cherries are profitable for the market, they are most profitable for the home supply and for beautifying the home. A man went through a smallpox hospital where many were sick nearly until death crying out "cherries are ripe" in order to cheer up the patients and give them something else to think about than their troubles and torments. Plant cherry trees on your home grounds and thus give your people something to think about that is bright and cheerful.

Apple Scab and How to Control It.

By Errett Wallace, Fellow.

The abnormally warm weather of April has started the apple buds much sooner than we had expected. If this continues it means that you must be ready to give the first application of spray very soon. The most important things to know are:

First, the proper time for each application. This must be determined by watching the fruit buds and the weather. Dates cannot be given. The first application should be made before the first rain after the blossom buds have been exposed, but before they have opened; the second after two-thirds of the petals have fallen, being sure to get the mixture on ahead of the rain, and the third about two weeks later. A fourth may sometimes be necessary, nine weeks after blossoms fall. Watch the fruit buds and the weather. Spray before rain, not after.

Second in importance is thoroughness. Remember that fungous infection can be prevented only where the surface of the young forming fruit and leaves are actually coated with the spray. Spraying from one side with the wind can therefore, at best, only protect one side of each apple.

Third, the spray used has in the past, almost universally been bordeaux mixture for the fungi, combined with an arsenical for the codling moth and other insects. A 3-4-50 formula with two pounds arsenate of lead to each 50 gallons of the bordeaux is efficient. Concentrated lime sulphur solution (properly diluted) with arsenate of lead has been used very successfully during the past season by a number of investigators and the spray injury or russetting of fruit which frequently follows the application of bordeaux was in all cases entirely avoided. A concentrate testing about 32 degrees Baume should be diluted about 1-30 or 1-35 according to our present knowledge and two pounds of lead arsenate should be added to each 50 gallons. Do not use lime sulphur stronger than indicated above on the foliage. Do not use arsenite of lime, paris green or any other poison except arsenate of lead with lime sulphur solution on foliage, since there is much danger of burning with the former while the arsenate of lead has been safely used in this way during the past three seasons.

To the Apple Grower.—These spraying directions have been prepared by Mr. Wallace, the expert in our department who is conducting the investigations on lime sulphur as a summer spray. These directions are, we believe, the most accurate and up-to-date that can be given for the control of apple scab. We shall be glad to answer any questions we can on this subject. Address all inquiries to, W. H. Whetzel, Pathologist, Department of Plant Pathology, New York State College of Agriculture, Ithaca, N. Y.

Orchard Notes.

Points to Remember.—Apple growing is one of the most profitable lines of agricultural effort in New England if conducted under modern and scientific methods. An acre of mature, bearing apple trees is the most valuable acre of land devoted to agricultural purposes in New England. Do not fear overproduction of the best. Have confidence in the soil, climate and varieties, and, most of all, in yourself to produce the finest apples in the world.

The Plum Tree.—The body of the plum tree is subject to injury from sun-scald, and it goes without saying that the tree should be headed low. The young trees of most varieties will need cutting back, and the tops thinning out, to develop them into desirable shaped trees. Some varieties will need pruning to spread them, and others of more straggling habit will need cutting back to inside buds or branches to make them grow more rapidly.

High prices for fruits are not so much on account of trees not bearing, but because of bearing trees being neglected. The number of trees in the farmers' orchards are many times those in the commercial growers' orchards, but they give but little or no marketable fruit. Take care of them or cut them down and use the site for the standard crops of your locality. This may sound harsh, but let reason obtain. It's coming like the better dairy cow and cleaner milk.

J. H. Hale, in an informal address, said that the success of the fruit grower largely depends on the inspiration and information coming from his own state society and kindred associations, and he knows whereof he speaks. In making experiments for information, the stations talk about check rows. But the bank checks are the real proof of the pudding. In marketing our fruit we have something to learn from the west-

ern men. They are men of business and fruit sellers, not merely producers. They put business methods into the selling of their fruit. Merchants cannot guarantee the barrel of New York Baldwins as they can the western box of apples. Every manufacturer grades his own goods and puts them on the market under a guarantee. The eastern fruit grower leaves the sorting to dealers, and cannot give any kind of guarantee. We cannot continue to do business on these old methods.

Location is of less importance than the man. We have often been told that there is no better location for apple production than New York state, especially western New York. If you attend fruit growers' meetings in Pennsylvania, Connecticut, Virginia and other places you will hear the same thing about these localities. New York is all right. So are those other localities. As to overproduction, we have heard the cry of fruit growing being overdone for the last twenty-five years. And good fruit is still in good demand and commands good prices. Good apples are now quoted in our city markets at \$5 and \$6 a barrel. This does not look like overproduction. Fruits please the eye and satisfy the taste. They will be wanted, and the demand is steadily increasing.



PEA PICKING TIME.

Peach Brown-Rot and Scab.

The readers of Green's Fruit Grower have probably not been troubled with this disease to a serious extent but it has appeared in certain portions of the country, causing peaches to rot on the trees or on the way to market. In order to control this disease, it is necessary to spray the trees when in foliage which is a dangerous proceeding.

Secretary James Wilson after repeated trials recommends self boiled lime sulphur which he says can be applied to the foliage without injury. Do not use commercial lime sulphur for no matter how much it may be diluted there is danger of its injuring the foliage of peach trees.

The preparation of self boiled lime sulphur mixture is as follows:

The mixture used in our experiments during the past season was composed of 8 pounds of fresh stone lime and 8 pounds of sulphur (either flowers or flour may be used) to 50 gallons of water. This appears to be about the correct strength, although in mild cases of scab and brown-rot a weaker mixture, containing 6 pounds of each ingredient to 50 gallons of water, may be used with satisfactory results. The mixture can best be prepared in rather large quantities—say, enough for 200 gallons at a time, making the formula 32 pounds of lime and 32 pounds of sulphur, to be cooked with a small quantity of water (8 or 10 gallons) and then diluted to 200 gallons.

The lime should be placed in a barrel and enough water poured on to almost cover it. As soon as the lime begins to slake the sulphur should be added after first running it through a sieve to break up the lumps. The mixture should be constantly stirred and more water added as needed to form a thick paste at first and then gradually a thin paste. The lime will supply enough heat to boil the mixture several minutes. As soon as it is well slaked, water should be added to cool the mixture and prevent further cooking or the mixture will be spoiled. It is then ready to be strained into the spray tank, diluted, and applied.

The stage at which cold water should be poured on to stop the cooking varies with different limes. Some limes are so sluggish in slaking that it is difficult to obtain enough heat from them to cook the mixture at all, while other limes become intensely hot on slaking and care must be taken not to allow the boiling to proceed too far. If the mixture is allowed to remain hot fifteen or

twenty minutes after the slaking is completed, the sulphur gradually goes into solution, combining with the lime to form sulphide, which are injurious to peach foliage. It is therefore very important, especially with hot lime, to cool the mixture quickly by adding a few buckets of water as soon as the lumps of lime have slaked down. The intense heat, violent boiling, and constant stirring result in a uniform mixture of finely divided sulphur and lime, with only a very small percentage of the sulphur in solution. The mixture should be strained to take out the coarse particles of lime, but the sulphur should be carefully worked through the strainer.

Renewing an Orchard.

I have had considerable experience in renewing old orchards, says a writer in "Garden Magazine." To take a ladder, a basket of tools, wax or clay, and start in to top-graft an old orchard is anything but a pleasant job. To stand on a ladder or some of the branches, to saw off and clear out the branches that are to be grafted, and attempt to split the winding and cross-grained stock and to fit the scion where the wood has split in one place and the bark in another, requires more patience than I ever possessed. That method is not only disagreeable, but uncertain

A Pennsylvania Editor's Trouble.

The editor of a newspaper in the western part of Pennsylvania wrote to Professor H. A. Surface, State Zoologist, that he has "troubles of his own" in the case of one of the best bearing peach trees in his fruit lot. The young peaches are shaken from the tree with each wind that blows. He attributed the cause of the dropping to a condition which can be best described as "declining." Gum exudes from the trees. Having been told to dig for worms, or borers, he did so, and located one or more each time.

State Zoologist Surface wrote, in regard to the trouble, as follows:

"The peach tree which you describe appears to have been injured by borers. The best thing to do for such pests is to remove them whenever they are present. Do this by means of a knife or wire. If there is gum which has brown specks like sawdust, mixed in it, it is due to the effects of the borer. If, however, the gum does not have such sawdust-like material, you may know that the borer is not the cause of its production. Gum may exude from a tree from one of several causes.

"An old tree that is injured needs very much to be stimulated. You can do this by cutting it back well and fertilizing and cultivating it. You should give it a dressing of wood ashes and ground bone or acid phosphate rock, with some barnyard manure added. You can buy a 'complete' fertilizer of any dealer in fertilizing materials, and thus give it a ration more nearly balanced. If possible, loosen the soil around it early in the spring, and, if the weather is dry, water it occasionally. It may possibly have San Jose scale on its branches, and this can be determined only by examination with a microscope. If you wish to send specimens to me for examination, I shall be glad to receive them and to reply promptly."

The Cherry.

The cherry, it is true, likes good soil, but is very impatient of much moisture. It must have good drainage to do well. The best of all soils—particularly for the sweet cherries—is sandstone upland. In such situation it is no trouble to have abundance of the finest cherries in their season. There is no surer fruit crop when all is right; and every one who has a proper location should grow cherries. The fruit ripens so early and is so grateful to young and old, says "National Stockman and Farmer."

How many farmers consider that a few cherry trees in bearing at home may prevent the children from committing depredations on their more thoughtful neighbors? Or, if it be said—what is true—that well-raised children do not do such things, it is also true that to be without this choice fruit while the neighbors are well supplied, is a trial to which no thoughtful parent would wish to subject his boys and girls.

And in obtaining young trees to plant, it is well to remember that the sweet cherries should always be budded (or grafted) on the Mazzard—their own kind. While the ale varieties are well suited with the Mahaleb as a stock, very few of the sweet cherries do well on it.

How Orchards Make Values.

Good orchards of all fruits have a fixed value that has been well maintained, says a writer in "American Agriculturist." They are rarely found for sale, their value being from \$200 to \$1000 an acre, the difference in price growing out of the location, condition and varieties grown, the latter being regarded as a matter of great importance, but which in many instances has been too little thought of in planting for commercial purposes.

A friend who is known as one of the best apple growers in my county, has assured me that \$1000 an acre would be no temptation as a purchase price for his orchard, he claiming that his plantation of Nonesuch and Baldwins has paid him more than ten per cent. net on this sum through the past ten years. The past season, with only a moderate crop and an unusual amount of defective fruit, the receipts from about twenty-five acres have amounted to something over \$4000. Now, how about the value of ordinary farm lands in general through the same season? A hasty review of the situation may not be amiss. A portion of the land owned by my father, independent of the old orchard referred to, sold some forty years since at \$135 an acre, and it has recently changed hands at \$60 an acre, and this is no exception.

Profit in the orchard depends upon the perfection of the fruits raised and the quantity. And the trees can not produce their full capacity unless they are well cared for.

Cucasa Remedy.—Cucasa is a soluble saccharate of copper and lime, coming into use in Europe in place of the rather cumbersome bordeaux mixture. Such institutions and authorities as the Royal Institute of Viticulture and Horticulture, Geisenheim, Germany, report favorably on its use. Cucasa yields a solution of copper that has all the fungicidal properties of bordeaux mixture, but with the added advantages of affording a clear solution in any dilution and of keeping comparatively long. Being a clear solution, it does not clog the nozzles of sprays; furthermore, much less of it need be used than of the bordeaux mixture, for efficient protection. A solution of cucasa is uniformly alkaline; there can, therefore, be no copper sulphate present in it that would injure the foliage. When sprayed on the tree, the thin layer of the solution is readily changed by the atmosphere, as in the case of bordeaux mixture, into the soluble film of copper compound that has the specific power to kill fungi. The thinness of this film has the advantage of interfering all the less with the important functions of the foliage, and also of sticking very close—which was found in one case to be for three months after one spraying.—"Mercks Report."

"It is usual," said the landlady, with great delicacy, "for my lodgers to pay as they go."

"Oh! that's all right," replied the boarder affably, "I'm not going for a long time."—Philadelphia "Ledger."

The Old Brush Pile at Green's Fruit Farm.

It was handy, that old brush pile,
For a dumping ground, 'tis true.
Here's a load of stuff to clean out;
Don't know where to put. Do you?
Why! Down the lane, have you forgotten
Where to rest such loads as that?
Sure, the man has not awoke yet
From his after-dinner nap.
Here they go, nine hundred peach trees,
Labels lost, no good to us.
Six and forty ten-foot maples—
My, it seems too bad to fuss
As we have for years to grow them,
And to have them turn out thus.
Just a scar on this one, sonny,
Here's a root—Oh! that's too bad.
Dread the man who when he dug them
Hacked as though he were a lad
Who'd never seen a fruit tree growing—
But 'tis done, no use in fretting—
Better burn than make men mad.
Now here's seventeen cut-leaf birches,
Took six years to grow them sure,
Got a little dried in trenches,
No good now for orders here.
Throw them on, boy, and that bundle,
What! my grief! three hundred vines
Left out in the frost one morning
Now only fit for warmer climes.
Take that hundred Bartlett pear trees,
Good! you say, why look! not much!
Six-foot trees, 'tis true, but crooked
That old brush pile waits for such.
And that pile of two-year currants,
Names all right, but roots are short,
If they went to our good patrons
Sure enough, you'd hear them snort.
Throw them on, no use a kicking,
All must to that brush pile go.
That is not gilt edged, my laddies,
If straight business you would do.
Soon a crackle and a splutter
And the lot in smoke will go.
Make some ashes for the garden
And more friends just so! just so!
—By the Superintendent.

Newest Notes of Science.

If the world's longest seven rivers
were placed end to end they would lack
but 500 miles of encircling it.

Aluminum paper, a cheaper substi-
tute for tinfoil, is made by pressing
the powdered metal into a thin coating
of resin on a parchment-like paper.

Combining the ultramicroscope and
the cinematograph, French scientists
have succeeded in producing moving
pictures of otherwise invisible microbes.

A new ladder designed for con-
venience in handling is made in three
sections, hinged together like a folding
screen and held rigid, when unfolded,
by pins.

The French army and navy are trying
out a new smokeless powder which, it
is said, is absolutely stable and which
cannot be exploded without a special
detonator.

Although the first American patent
for a metal pen was granted a Balti-
morean in 1810, it was half a century
after that the industry began to flourish.

Brazil will employ fifteen inspectors
on substantial salaries to report on crop
conditions, soils, water supplies and
every other subject that pertains to
agriculture.

While 2000-horsepower locomotives
are common in the United States and
many exceed that size, a 1200-horse-
power engine is considered very large
in Continental Europe.

An Italian scientist sends pictures by
telegraph by decomposing them, as it
were, into elementary signs, designated
by letters of the alphabet, which are
transmitted in the ordinary way and
retranslated into a copy of the picture
again.

POSTUM FOR MOTHERS

**The Drink that Nourishes and Supplies
Food for Mother and Child.**

"My husband has been unable to
drink coffee for several years, so we
were very glad to give Postum a trial
and when we understood that long boil-
ing would bring out the delicious
flavour, we have been highly pleased
with it.

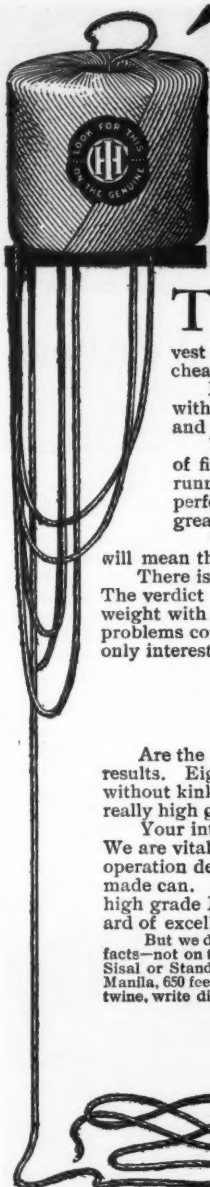
"It is one of the finest things for
nursing mothers that I have ever seen.
It keeps up the mother's strength and
increases the supply of nourishment for
the child if partaken of freely. I drank
it between meals instead of water and
found it most beneficial.

"Our five-year-old boy has been very
delicate since birth and has developed
slowly. He was white and bloodless.
I began to give him Postum freely and
you would be surprised at the change.
When any person remarks about the
great improvement, we never fail to tell
them that we attribute his gain in
strength and general health, to the free
use of Postum and this has led many
friends to use it for themselves and
children.

"I have always cautioned friends to
whom I have spoken about Postum, to
follow directions in making it, for un-
less it is boiled fifteen or twenty min-
utes, it is quite tasteless. On the other
hand, when properly made, it is very
delicious. I want to thank you for the
benefits we have derived from the use
of your Postum."

Read "The Road to Wellville," found
in pkgs. "There's a Reason."

Ever read the above letter? A new
one appears from time to time. They
are genuine, true, and full of human
interest.



THE EXPERIENCE OF THE MAJORITY OF FARMERS BE YOUR GUIDE IN BUYING TWINE

THE time has come to order your binder twine for the 1910 harvest. Twine dealers are placing orders for their season's stock. The mills are running. Now is the time for you to decide the twine question. It is something that requires careful consideration. The success of your harvest will depend on the uninterrupted work of your binder, for no binder can work well if you use a cheap grade of binder twine.

It is our aim to have every farmer who uses IHC twine go through the 1910 harvest season without a break in the field. We have much more at stake than merely selling twine. Your interests and ours are the same.

We know that the raw materials from which IHC twines are spun have the quantity and quality of fibre that insure greater strength than is found in any other twine. They are evenly spun—smooth running—do not tangle in the twine box—work well in the knoter, insuring perfect binding and perfect tying. They insure your being able to work your binder through the entire harvest season with greatest speed and economy and are therefore practical profit insurance.

Those who buy cheap twine will certainly have trouble—delays due to tangles, knots and breaks will mean the loss of valuable time—and every delay at harvest time will cut down your profits.

There is a sure way to avoid this. Let the experience of the past be your guide in purchasing your twine. The verdict of the majority of the farmers of this country is a safe guide. Their decision should have more weight with you than the statement of any twine manufacturer. These farmers know. They have the same problems confronting them that you have. They have no axe to grind. They do not sell twine. They are only interested in results.

I H C Brand of Sisal—Standard Sisal Manila or Pure Manila

Are the twines used by the majority of the farmers of this country. They have been proved to give the best results. Eighty-five to 90 per cent of the farmers use Sisal. It is smooth running and works at steady tension without kinking or tangling in the twine box—insuring perfect binding and perfect tying. Its only equal is the really high grade Manila twines such as bear the IHC trade-mark.

Your interests and ours are identical on this twine proposition. We have more at stake than selling twine. We are vitally interested in the successful operation of hundreds of thousands of binders. On their successful operation depends our success—and we know they cannot operate successfully with poor twine. No binder made can. For this reason we have given the twine problem careful study. When we say "Stick to Sisal or high grade Manila bearing the IHC trade-mark"—we do so because we know them to be the highest stand-ard of excellence in binder twine.

But we don't ask you to do as we say. We want you to be the judge. But your judgment to be right should be based on facts—not on the statement of any twine man. And the fact is—that the majority of the farmers of this country use IHC twine. Sisal or Standard (which is made from pure Sisal) comes 500 feet to the pound; high grade Manila, 600 feet to the pound; Pure Manila, 650 feet. See your local IHC dealer at once and let him know how much you will need. If you want more facts on binder twine, write direct to

International Harvester Company of America Chicago U S A

(Incorporated)



Questions for Discussion.

The Philadelphia "Inquirer" has taken pains to obtain a list of examination questions submitted to pupils of a Pennsylvania school district; the pupils ranging in age from 13 to 15 years. The questions are given as follows:

Discuss the antiquity of man.
Give an account in detail of the early forms of writing.
Give a detailed account of the Aryan race.
Give a brief history of the Assyrians.
Give an account of science among the Egyptians.

Discuss commerce among the Phoenicians.

Where did the Phoenicians establish colonies? And why?
Discuss the important customs of the Babylonians.

How does science establish the loca-
tion of the home of the first parents?
Give a description of Egypt, the con-
dition of the soil, etc.

Green's Fruit Grower suggests the following questions would have been more sensible:

Discuss the opportunities of man for success and reward.

State in what way agriculture and horticulture have advanced in recent years.

What evidence have we that the human race is advancing in intelligence?

Give a brief history of the United States.

State why we are better off than were the Egyptians of old.

Discuss free business relations and dealings between our different states.

Why is England the greatest colonizer in the world?

Discuss the comforts of modern houses as compared with those occupied by the Babylonians.

Why should not American people conserve fertility for the land as do the people of Asia and other old countries?

Time and Patience Required.

Many years ago a man discovered a new kind of lubricating oil, the best ever known for lubricating watches and clocks, an oil which would lubricate in any climate or temperature and under all circumstances. He tried to introduce it but like other new things of great value watchmakers were afraid to use it. The introducer of this oil

became discouraged, lost his property and died. He gave his trusted clerk a few gallons of the oil. Years after the value of this oil was discovered. Then everybody wanted a supply but none could be secured for the secret of its making was lost with the death of the inventor.

The N. Y. "Sun" adds: "At the time of the great fire in Boston three of these portions of the oil were destroyed and the fourth portion, which made just about one quart, was sold for \$200 to the biggest watch concern in America.

"The best oil to-day is made from the porpoise jawbone, the process having been discovered by sailors and fishermen in 1816. The sailors extracted some of the oil from the jawbone and gave it to carpenters and others who used oil stones for sharpening their tools. Since it did not gum or glue when so applied the idea was finally suggested that it was just the thing for watches and clocks.

"What is known as blackfish oil is also used extensively now. Olive oil was used to oil the wheels of clocks and watches a hundred years ago."

The Gold-Brick Game Reversed.

The Department of Agriculture takes note of the interesting fact that selling gold bricks to farmers is a decaying industry, and the balance of trade between city and country in that line has been reversed. The farmer who would pay a hundred dollars cash to an engaging stranger for a warranty deed to the Flatiron building has become so rare that it is not worth J. Rufus Wallingford's time to hunt for him. The suckers are more plentiful in the opposite direction—namely, among those to the Flatiron building born. If you wish to swindle, nowadays, don't look for hay-seeds, but insert in the Sunday edition of your favorite yellow newspaper something like this:

"Back to the Land! Raise Gooseber-
ries! Gooseberries are sure to bring you a hundred dollars an acre, net, with only light, healthful labor. Choice gooseberry land, with the crop already to pick, may be had at ten dollars an acre, two dollars down, balance in a hundred years. Live close to Nature; avoid flats, street cars and taxes. Send your application with initial payment to Fake & Co., 13 Gull Street."

Vast tracts of bare sand; innumerable "choice locations" in the midst of

marshes; lands incapable of producing anything except weeds and malaria are offered to the innocent city clerk who yearns for the simple life.

It is really crueler than the original gold-brick game, for it takes base advantage of a natural wholesome and poetic desire. But out in the country the farmers can't help grinning a little over it—"The Saturday Evening Post."

Legal Oddities.

"You want news," the member of the bar said to "The Times" representa-
tive. "How will some odd court decisions, recently rendered go? Out in Idaho, while a jury was kept together during a trial, the members were attended by a barber, who brought in a bill against the county and it was decided that it was not a necessary expense. In Iowa a woman refused to pay her husband's board and the court said that she wasn't liable. In Texas, in a case of homicide, it was shown that a baseball bat is not a deadly weapon, and in the absence of anything to show that there was intent to kill the person using the bat could not be convicted. In Maryland a strenuous attempt was made to prove that the natural decay of a building was 'an act of God' in a meaning of a provision in a lease, but the court held that as a cause decay was not in it with lightning, storm and frost. In the same court, if I mistake not, a guardian had himself judged faulty for investing his ward's funds in a bank that failed when he might have chosen a safe bank."—Hartford "Times."

Gems of Thought.

Our infinite obligations to God do not fill our hearts half as much as a petty uneasiness of our own, nor His infinite perfections as much as our smallest wants.—Hannah More.

Begin by regarding everything from a moral point of view, and you will end by believing in God.—Dr. T. Arnold.

How many of us live in the dark, wretched, poverty stricken Grumble Lane, when we might live on broad, sunny Thanksgiving street, with plenty of God's sky above us!—"Christian Work."

No man ever prayed heartily without learning something.—Emerson.

In the sweet morn of life, when health and joy laugh in the eye, and o'er each sunny plain a mild celestial softness seems to reign.—John Leyden.

THIS 120-EGG \$7.50
SAFE HATCHER
FREIGHT PREPAID
BIGGEST value of the year.
Get new low, delivered prices
on all sizes of famous
Ideal
Incubators. Metal-covered all
round, self-regulating and ven-
tilating. Safest and surest. Delivered free east of
Missouri River and north of Tennessee. Write for
delivered prices to points beyond. Lowest prices
on Brooders, too. Send for free book today.
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Please mention Green's Fruit Grower.

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Get Busy. We start you.
Most successful Poultry Farm.
Thousands to choose from.
Buy Eggs for Start. Low
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valuable book, "Profitable Poultry," sent for 3 cents.
BERRY'S POULTRY FARM, Box 27, Clarinda, Iowa.

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Make your own Fertilizer at small cost with
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It is an entire new invention. Wonderful how easy it is to save
the dying chicks. Guaranteed. Write for booklet.
J. S. KLOCK, Box 18, URBAN, PA.

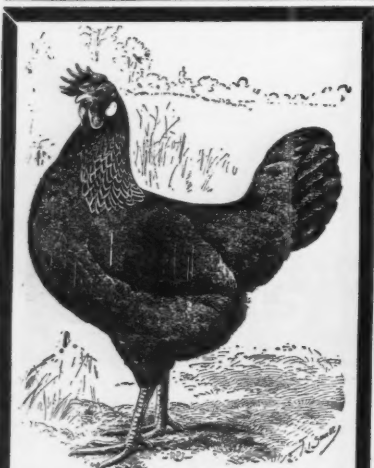
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and S. Hamburgs, 14 varieties. Catalogue, 25 years experience.
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90 VARS All breeds Poultry, Eggs, Ferrets,
Dogs, Pigeons, Hares, etc. List free. Colored Dec.
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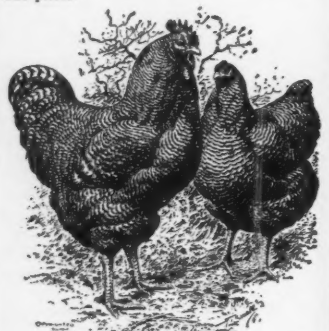
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list of fruit, grain, and stock farms.



SINGLE COMB BROWN LEGHORNS

The Popular Leghorn.—The acknowl-
edged queen of the practical egg-laying breeds
is the Leghorn, when judged by the standard of
the greatest number of marketable eggs produced
at least cost. Not only are the hens persistent
layers, but they are extremely active foragers and
waste no time in setting. Like a good milch cow
they put little fat upon their bones, but devote
all surplus nourishment to steady production.
They eat less than the heavy breeds, but what-
ever they consume is put to good purpose. Price
of S. C. Brown Leghorns and B. P. Rocks, all
one price.



BARRED PLYMOUTH ROCKS

This breed is as solid as its name and is often
called the "Farmer's Friend," the "All Round
Fowl," the "Old Reliable." It is the bird for
business, and deemed by many the best fowl
for farm and home raising. It is not only a
good layer, but is quick to develop for the early
market. As a far-sighted farmer once said to
us, "When you kill one you've got something."

PRICE OF BIRDS OF ALL BREEDS:
Cockerets, \$2.50, \$3.00 and \$5.00 each; Pullets,
\$2.00, \$2.50 and \$3.00 each; Trios, \$6.00, \$8.00
and \$10.00. We ship no cull birds. The lowest
priced birds offered are standard bred, practi-
cally as good for breeding purposes as the
higher priced birds. The \$4.00 birds offered
are the pick from the flock containing the largest
percentage of standard points and therefore
commanding a higher price since it makes them
eligible for show purposes.

PRICE OF EGGS FOR HATCHING FOR ALL BREEDS:
From good breeding pens, \$1.00 per 15; from our
best breeding pens, \$2.00 per 15. While we do not
guarantee the fertility of our eggs we are willing
to replace all settings from which the purchasers
receive less than six chicks, at half the price paid.

GREEN'S NURSERY CO., Rochester, N.Y.



Care of Eggs in Hot Weather.

The following are among the requis-
ites mentioned by a United States agri-
cultural bulletin to the placing of eggs
on the market in proper condition:

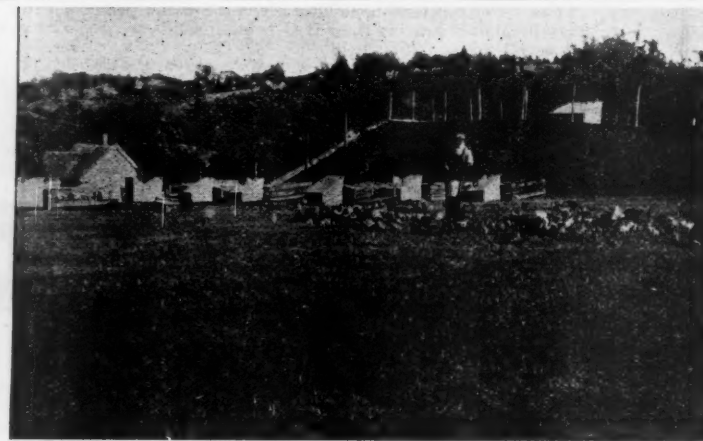
1. Keeping hens that produce not
only a goodly number of eggs but eggs
of moderately large size (weighing two
ounces each on an average), Plymouth
Rocks, Wyandottes, Rhode Island Reds,
Orpingtons, and Leghorns or Minorcas
that are used on egg farms are varieties
that may be expected to do this.
2. Good housing, regular feeding
and watering, and, above all, clean,
dry nests.
3. Daily gathering of eggs, and,
when the temperature is above 80 de-
grees, gathering twice a day.
4. The confining of all broody hens
as soon as discovered.
5. The rejection as doubtful of all
eggs found in a nest that was not visited
the previous day. Such eggs should be
used at home, where each may be
broken separately.

edge; and what is still more significant,
he does not want to candle, if he can
help it, because the farmers' trade is
worth more than the loss on the eggs,
and as long as competition exists the
first effect of candling will be to dis-
gruntle the farmers and lose their
trade.

Set Ways of a Sitting Hen.

"The pig is notoriously pig headed,"
says J. Allen Prewitt, ex-mayor of In-
dependence. "But nothing is more 'set'
in its ways than a 'setting' hen. You
can ring a hog's nose and control him,
but you have to wring a hen's neck to
convince her she shouldn't 'set' when
she makes up her mind to. Provided,
of course, that animals have minds.

"We have a Brown Leghorn hen
which determined to 'set' some eight
months ago. Mrs. Prewitt and myself
have spent eight months trying to
'break her up.' It has narrowed down
now to a contest of will power. We



The above photograph represents the successful poultry farm of C. T. Stephens, New Hampshire.

6. The placing of all summer eggs,
as soon as gathered, in the coolest place
available.
7. The prevention at all times of
moisture in any form coming in con-
tact with the eggshells.
8. The disposal of young cockerels
before they begin to annoy the hens.
Also the selling or confining of old male
birds from the time hatching is over
until cool weather in fall.
9. The using of cracked and dirty
as well as small eggs at home. Such
eggs, if consumed when fresh, are per-
fectly wholesome, but when marketed
are discriminated against and are like-
ly to become an entire loss.
10. The marketing of all eggs at
least once a week, and oftener when
convenience allows.
11. Keeping eggs as cool and dry
as possible while on the way to town
and while in country stores.
12. Keeping eggs away from musty
cellars or bad odors.
13. The use of strong, clean cases
and good fillers.
14. The shipping of eggs to the final
market at least once a week and as
much oftener as possible.

An egg forty-eight hours old that has
lain in a wheat shock during a warm
August rain would, it is said, probably
be swarming with bacteria and be
absolutely unfit for food, while another
egg stored eight months in a first-class
cold storage room would be of much
better quality. The flavor or odor of
an egg may be noticeably influenced by
the feed of the hen. This has been
demonstrated by feeding hens heavily
on onion tops or garlic. Eggs, by stor-
age in musty cellars or in rooms with
citrus fruit, vegetables, fish, or cheese,
may become so badly flavored as to be
seriously objected to by a fancy trade,
and yet there is no means of detecting
the trouble without destroying the egg.

The general store, where the great
majority of the eggs first leave the
farmers' hands, is, the bulletin says,
above all the weakest spot in the in-
dustry. The merchant cannot candle,
for he has not time, facilities, or knowl-

used every method to break up a 'set-
ting' hen that science has devised. We
locked her up in solitary confinement,
we threw cold water in her face, we
threw her off one nest, then another. But
alas, in vain.

"That hen only looks disgusted, utters
a few motherly 'cluck clucks' and
settles down to 'setting' on the bare
ground, on a fence post or in a tree.
She has passed the stage where she
requires a nest or the semblance of
one. She has a china nest egg which
she rolls about with her on her per-
ambulations, 'setting' on it at any place
or any time where she gets a few
moments, free from persecution.

"That hen's long fight for a chance
to rear a family has finally been won.
She did not hatch her offspring from
the china egg, but she adopted the new
born progeny of the family cat and
drove the mother away. She moved
her china egg into the nest with the
kittens, so she not only has the animals,
but her former prospect as well. When
the kittens, whose eyes are not yet
opened, mew for milk we muzzle the
hen long enough for the mother cat
to feed them. Then the hen reclaims
the brood and drives the cat away with
a sharp poke on the nose."

Cabbage for Poultry.

The best vegetable for feeding hens
is cabbage, for it is succulent, and con-
tains the largest amount of ash and
protein of all vegetables.

We hang them up just so the hens
can pick them clean to the stump. The
greatest difficulty is in keeping cab-
bages in good condition through the
winter. Few methods have been suc-
cessful with us. We have tried piling
in the barn and covering with hay, but
they sweat so easily that rot soon be-
gins. Burying in a trench in the garden
was only partially a success. A cool
cellar with the cabbage on shelves or
hung from the joist has given us the
best results. The late flat Dutch gives
the most feed and requires the least
work to raise.—M. E. Chapman.



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Some farmers have not investigated
concrete and its many uses on the farm,
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material. This is a mistake. Concrete
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never requires repair. Many of the
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specifications and photographs of farm struc-
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position—the same for everybody. Atlas Portland
Cement is made of genuine Portland Cement
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waste, no danger. Write for circulars
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They will plant and care for your trees
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Do away with all roofing troubles. Durable,
Dependable, Fireproof, Ornamental, Inexpen-
sive. Catalogue Montross Co., Camden, N. J.

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Muscles or Bruises, Cure the
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Splint, Side Bone or Bone Spavin
No blister, no hair gone. Horse can be
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Reduces Strained Torn Ligaments, En-
larged glands, veins or muscles—heals
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The above photograph shows part of a flock of White Holland turkeys. There are 146 young birds in this flock. The White Hollands are good layers and good mothers.

How to Succeed with Turkeys.

Artificial means can be adopted for hatching turkey eggs or by placing them under ordinary hens. These methods can never be more than a substitute to the real way, says C. Odell Kaynes, in Lockport "Journal." There is no other method of incubation equal to hatching eggs by the hen that lays them. Most all other fowls can be hatched and raised by artificial means successfully, but such is not true of turkeys because the habits of the ordinary hens or incubator after the poults are once hatched are entirely foreign; do not agree with the nature in the young turkey's blood and to thrive, live long and well he must be allowed to exercise those natural instincts and long legs, all of which the ordinary hen or brooder will not permit. There is only one absolute method to employ, namely, Mrs. Turkey Hen and her wisdom. She should be set in a secure place, free from skunks and vermin of all kinds that might take her life or destroy her eggs. In a box or barrel or on the ground, in a location where the heavy rains will not drown the life in the eggs or the hot sun cook them. When Mrs. Turkey becomes broody and the nest is thus prepared, if previously selected by Mrs. Turkey Hen, go after dark and carefully place thirteen eggs of uniform size under her. If conditions or environment have forced her to a location which is not desirable a barrel should be used. Placed on the side, remove the ends, prepare the nest, place Mrs. Turkey in on a few decoy eggs, close both ends so that there may no light enter. After twenty-four hours remove the decoy eggs, and substitute thirteen of her own make and no more at any time. In three or four days remove the blanket from the end she faces and leave it open all night unless you wish to protect her from weasels, in which event place a close meshed screen in front of the barrel in such a position that she can push it over in case she wished to leave the nest to feed. Keep close watch that she returns to the nest within a reasonable length of time, after which remove the blanket or screen on both ends of the barrel as heretofore described.

Healthful Foods.

A successful poultry woman writes the Indiana "Farmer" that onions chopped fine and mixed with the hen's food occasionally will promote health. Onions are a great poultry tonic, and they are relished by fowls old and young. Our little fall-hatched chicks tumble over one another to get to their feed when onions are mixed with it. Some folks have a good deal of faith in the advertised egg-producing foods. These foods are all right when fed in right amounts, but if fed too liberally and too often they are apt to cause disease. And the indiscriminate use of stimulants is also to be condemned. The first things some people do when a hen gets out of condition is to pile red pepper down her throat. And they season the hen's feed liberally with cayenne pepper to increase the egg yield. All stimulants are weakening in their effects, and cayenne pepper is a stimulant and should be fed sparingly. The best egg stimulant and health promoter is a variety of good, wholesome food adapted to egg production, dry, comfortable houses, and sanitary surroundings.

Give charcoal to your fowls. It has a tendency to keep them in health. Corn on the cob, thoroughly scorched, will furnish charcoal in as good a form as there is. Feed it freely. No harm can come from it.

Science in the poultry yard is all right, but common sense is better.

Cold Storage for Eggs.

Speaking of cold storage for eggs it is pointed out that this is a development of the last twenty-five years, and undoubtedly the industry as a whole has been of great benefit to both egg producer and egg consumer. It has tended toward the levelling of the price of eggs throughout the year and has resulted in a large increase in the fall and winter consumption. This means a larger total demand and a consequent increase in price. Occasional articles have been printed calling attention to the fact that the cold storage men were reaping vast profits which rightfully belonged to the farmer, and advising the farmer to send his own eggs to the storage house or to preserve them by other means. As a matter of fact, the cold storage of eggs has not of late years been particularly profitable, there having been severe losses during several seasons. Even were the profits of egg storing many times greater than they are, the above advice would still be unwise, for the storing, removing, and selling of the farmer's individual case of eggs would eat up all possible profit. When eggs in the hands of large operators are properly preserved in cold storage, the best and most efficient methods known are in reality at the farmer's service. Because of the severe competition that prevails in egg storing, the farmer is paid all the increase in price which the business will stand. A comparison of the summer prices of eggs now with summer prices before days of cold storage will substantiate the truth of this statement.

A New Record in Egg Prices.

A rather appalling item of news comes from Scranton regarding a \$12,000 hen and her achievement in producing a \$25 egg. In outward appearance the egg was not unlike other eggs, and the announcement of its deposit in the nest was in the tone of the ordinary barnyard cackle. But the egg was stolen, and the owner offered a reward of \$25 for its return—a valuation which may well cause terror in the heart of the ultimate consumer. Sixty cents a dozen for eggs is a stiff price, but \$25 apiece is a frightful sign of the increasing cost of living. The thief had much better have stolen the hen, killed and eaten her, and put an end to her pernicious activity. Hens that lay \$25 eggs should not be tolerated. Their example is bad. Other hens will be possessed by the spirit of extortion and refuse to lay eggs that anybody can afford to eat. Any such tendency should be speedily and firmly nipped in the bud.

Fresh Air for Hens.

Did you ever consider the physiological reasons for the necessity of fresh air for poultry? It is doubtful if five out of fifty persons really understand the matter.

Fowls never sweat—they have no sweat glands. A fowl's natural temperature is much higher than that of human beings—in fact, it is above fever heat. That is the reason that a draft does such mischief. We might almost say it signs a chicken's death warrant. Perhaps that is putting it a little too strong, but it is not far from the truth anyway. Somebody has said that a fowl's body is a regular little engine; the heart beats like a trip-hammer and pumps blood like a fire engine. Hence fowls must have plenty of fresh air at all times to be healthy.

Count on about three months time for raising a broiler.



Irrigated Farm and Fruit Lands

The small irrigated farm or orchard means greater production with less labor. It takes away the element of chance and makes a good crop a reasonable certainty. The land in the Northwest such as is being irrigated by government and private projects in Montana, Idaho, Washington and Oregon, on or reached by the Northern Pacific Railway, is exceedingly rich and requires only moisture to yield bountifully. This moisture is provided by irrigation, which makes irrigated farming, fruit and vegetable raising a scientific profession, not a drudgery. The ideal climate is a strong argument in favor of the Northwest.

If you want to know more about the possibilities of making your efforts bring you greater returns, write for information about these irrigated lands. Maybe the "dry-farming" territory will interest you. Write tonight and state what section you are most interested in. Don't delay. The information will cost you nothing and will pay you well.

The Scenic Highway Through the Land of Fortune
Northern Pacific Railway
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Dept. 212, St. Paul, Minn.
A. M. CLELAND, General Passenger Agent, ST. PAUL.



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An Autobiography worth many dollars to one interested in farming and fruit growing. It tells how the author, through success out of an abandoned farm, by reason of the book many have caught the inspiration of the author, and by the methods set in the book, have realized success. By sending 5 cents to the publisher, the expense of publication is covered. Address, C. A. GREEN, Box 108, Rochester, N. Y.

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UNTIL YOU INVESTIGATE "THE MASTER WORKMAN," a two-cylinder gasoline, kerosene or alcohol engine, superior to any one-cylinder engine, revolutionizing power. Its weight and bulk are half that of single cylinder engines, with greater durability. Costs less to buy—less to run. Quickly, easily started. Vibration practically overcome. Cheaply mounted on any wagon. It is a combination portable, stationary or traction engine. SEND FOR CATALOGUE. THE TEMPLE ENGINE MFG. CO., 480 West 16th St., Chicago. THIS IS OUR FIFTY-SIXTH YEAR.



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Fig. 702

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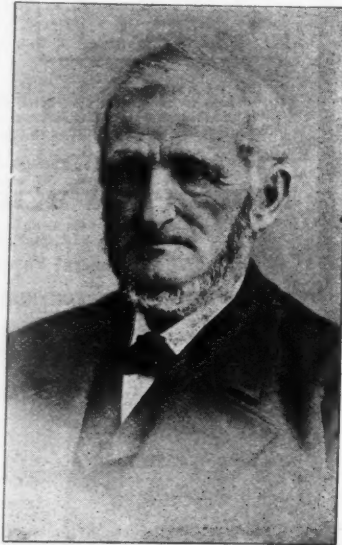
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Fruit Farm Stories.

The Justice of the Peace.

Written for Green's Fruit Grower.

My dear friend: I congratulate you on having been elected to the dignified position of justice of the peace of the town in which you were born and in which you have lived for the past forty years. I should feel myself honored to be elected to such a position as you now hold for it indicates that people have confidence in you and believe you will judge fairly and act squarely in any suit or question which may be brought before you. I have but little knowledge of the duties of your new office. I do not know how large the fees are to which you are entitled. I do not know how far you may be disturbed in your work by this new office, but taking all things into consideration I think your view of men and things will be enlarged, and your opportunities for doing good increased, by the official position to which you have recently been elected. Every your friend, C. A. Green.



SQUIRE NURSE, THE JUSTICE.

Reply by the newly elected justice of the peace:

My dear friend: I thank you for your congratulations. I confess that my bosom has swelled with pride at the new office which has been placed at my disposal. I realize that it is an honor to be known as Squire Jones. I remember my dignified townsman, Squire Nurse, who was justice of the peace of this town for many years. He was a man of wealth and leisure. It pleased him to become familiar with the affairs of others, the troubles and disputes of the neighborhood, and caused him no inconvenience to be constantly trying legal lawsuits over small affairs between neighbors. Squire Nurse was looked up to as an honorable citizen. Long years after he had ceased to be justice of the peace he was called Squire Nurse and held in high esteem.

I do not know what pecuniary reward I will receive as justice of the peace of my native town. I hear of one justice who received \$500 per year for his services. I may receive more or less. I scarcely know what my duties will be. Thanking you for your kindness, I remain, Seth T. Jones.

The above letters give an idea of the opinion which many people have of the office and work of a justice of the peace of a township of the farming district. In fact not one person in a thousand knows much about the duties of a justice of the peace, what he gets for his services, or how valuable his services may be to the community. For this reason and owing to the desire I have to give information, I relate this amusing and interesting account of the actual experience of a justice of the peace.

My friend who was elected to this office is not a rich man. He started poor and is trying hard to keep up a large life insurance policy and to pay for his little farm. He is a man of noted integrity, a leader in his local church, a man who desires to do right and who is interested in every new or old worthy enterprise. He did not seek this office, but when the office was thrust upon him he accepted it with but little knowledge of the discomforts which might arise and of the slight revenue which he might receive.

His First Lawsuit.

Seth Jones had almost forgotten that he was justice of the peace. He was busily engaged in pruning his orchard a long distance from the house one day when he was approached by a well known neighbor. This neighbor had purchased of another neighbor two infant pigs. These two pigs had died. He desired to sue the neighbor for the price of the pigs. His honor, the justice of the peace, dropped his tools, put on his coat and went with the neighbor to the house to look over the law on the subject and decide what was best to do. An hour or two was spent in looking up the law. My friend, the justice, was not a lawyer. He had never studied law and yet was expected to sit as a judge in the trial of cases where the best lawyers in the country were represented as counsel. Therefore in giving advice or in deciding cases he had to resort to law books. Finally the neighbor who had lost his pigs left to consider the advice which the justice had given him to settle the case. The next day the justice was again disturbed by the appearance of both of the neighbors who were interested in the pig case, who had come to see if it was possible to secure a settlement. Again the justice dropped his work and went to his home to look over the points of law and to advise his warlike neighbors as to the best way to settle the case for both of them without a lawsuit. The belligerent neighbors consented to settle the case without any lawsuit, therefore since there was no trial our friend the justice received not one cent fees for having spent a day's work for the peace of the public.

Later on my friend, the justice, was preparing to leave home for the city twelve miles away on important business. His horse was harnessed and hitched at his gate. Both he and his wife were dressed and ready for the journey when in came a townsman who wanted to get a tenant out of a house as the tenant would not pay his rent. Our justice could not excuse himself by saying he had other business on hand. No, he was compelled to leave his horse standing there and wait while he looked up the law in regard to tenants and made out the necessary papers to be served on the tenant in order to get him out of the house as quickly as possible. For this service the justice received sixty cents.

It seems as though every time there was trouble in the town Justice Jones was at his most exacting work, thus one day in haying when there was a lot of hay ready to be drawn in, and there was prospect of a shower, a widow lady drove up to his place and complained that a wicked boy had killed her peacocks and ducks. She wanted to begin suit immediately. Justice Jones spent two hours in convincing this worthy widow that it would be best to settle the case providing the father of the boy, who was a man of wealth, would pay for the birds wantonly destroyed. The widow after considerable urging on the part of the justice decided to appeal to the father of the boy who was willing to settle the bill of damages, thus there was no lawsuit and since there was no trial there was no pay for the justice of the peace.

No farmer or fruit grower spends much of his time in his house, and it was this way with Justice Jones. Thus when the postmaster came to swear in his reports before the justice he found that dignified official busily engaged at some important work at some distant point from the house. Thus time and again the justice left his tools where he was using them and proceeded at once to the house where he took an acknowledgement for the postmaster. Then the postmaster asked "What is the fee, Justice?" Now the postmaster and our justice had long been good friends and neighbors, so the justice said, "Oh, we won't say nothing about that." And the postmaster thanked the justice and again went to the distant fields to complete his work.

Another important duty of the justice of the peace was to acknowledge the signatures on deeds and mortgages whenever a sale of property occurred in the neighborhood. Since the parties selling were friends or acquaintances of the justice he hardly felt like charging his fee of 25c, but he should have done so. No one should have been willing to have disturbed the worthy justice at his important work to take an acknowledgement of a deed or mortgage

without paying the small sum of twenty-five cents.

The people of a town seem to be bent on making wills. Having but little knowledge of how a will should be made out in most cases they go to the justice for information, therefore Justice Jones was often interrupted at his work by people calling on him to have a will made. Sometimes he would be asked to hitch up his horse and drive two to three miles to attend to the making of a will. In one case like this after the will was made the justice was asked how much was his fee and he replied, "Three dollars, considering my long drive to reach your house." "This is too much," said the willmaker. He finally paid one dollar for this valuable service.

One day our justice was called in from the field by a grocer. His patron who owed him for a bill of groceries was about to leave the country. He wanted the justice to look up the law on this subject and to tell him how to collect his bill. There was no fee for this important work.



Our justice was frequently called upon to marry people. How many readers are there of Green's Fruit Grower who recognize the fact that they can be married by a justice of the peace? Justice Jones had many amusing experiences in marrying people. Often he would hesitate and sometimes would refuse to perform the marriage service. Girls fourteen and fifteen years old would say that they were nineteen or twenty and there were many other surprising circumstances which our friend would gladly have missed the opportunity to adjudicate. Then the question of marriage fees was an interesting one. I do not know how much fee the law sets for the justice who marries a happy couple but on the average it is my opinion that he does not receive more than one dollar for such marriages.

Having mentioned some of the unpleasant duties of the office of the justice of the peace I must speak of some of the pleasant work. The justice of



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"BACK TO THE FARM."

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the peace is a member of the town board. He receives two dollars for each meeting of the town board. Sometimes there is a joint meeting of the town board and town settlement day when the justice receives three dollars for his day's work. This meeting of the town board is a pleasant affair. Less pleasant are the death certificates which the justice of the peace must sign, for each of which he receives twenty-five cents.

My friend the justice at the end of his year's service found that he had earned from the various forms of services \$35 in place of the possible \$500. He found that the justice who had earned \$500 in one year was located near a city where many tramps were arrested, and where each commitment of a tramp brought him one dollar. There were also in that locality many saloons and much drinking. When a man was found drunk the justice was entitled to one dollar for commitment.

It will be recognized from the foregoing statements that the reward offered a justice of the peace for his year's work is slight in comparison with its importance. The office is an important one and a necessary one. It is a great convenience to have an official in the center of the town where he can be easily reached, who can perform such valuable services as can a justice of the peace. The house of the justice is in fact a rural courthouse. In the cities the county court is always in session. In this rural court the same is true. It is always in session, thus the justice must leave important work to attend to affairs in which he has no personal interest, and for which he is paid but a fraction of the amount he should receive for his valuable services.

Romance of a Night Call.

One cold windy night in mid-winter his honor the justice of the peace sat before the fireplace in his cozy library thanking God that he was not a policeman obliged to be out in the storm tramping his beat, or a fireman liable to be roused any hour to fight the flames, or a railroad engineer called upon to run his train at midnight, or a sentinel on the tower watching for danger all night long. He was thankful that he had a home and shelter and that no one could call him out of this home on such a night as this.

The wind steadily increased shaking the shutters and forcing the driving snow against the window panes. "How glad I am," said our friend, "that I am not a doctor, for then I would be at the mercy of any man, woman or child suffering from colic, indigestion or toothache, and made to leave my warm bed any hour of the night to plod through the almost impassable roads."

Our friend the justice had taken a severe cold and had planned after warming his feet at the fireplace to retire early to bed, when the door bell rang violently. The good wife hastened to the door and found there an old colored man who inquired, "Is the boss to home?"

"What boss?" asked the wife of the justice.

"Why, the boss, the judge," replied the darky.

"Yes, he is at home. What can I do for you?"

"I wants to see the judge on some peticular buznez," replied the visitor who thereupon was shown into the library where the justice of the peace was sitting.

"Well, sir," asked the judge, "what can I do for you?"

"I hav hearn that you was the justice of the peace. I lives at the old lime stone mansion of Col. Brewster. Perhaps you knows that the Colonel died about ten years ago. His wife has been took offel seek and she is dien. She wants to make a post mortem affidavit before she dies. She wants you to come right away and take her affidavit."

"But she lives four miles away. I am sick making it impossible for me to drive out on such a night as this."

"I knows the roads is mighty bad and full with snowbanks. Yah see the old lady won't live till mornin' and when she dies all this post mortem buznez will die with her and be buried with her in the same grave."

Here was a dilemma, a trying situation. Our friend the justice could not have been tempted to drive four miles on such a night as this for one hundred dollars, and yet he was expected to hitch up his horse and run the risk of losing his life by catching more cold and drive four miles out and four miles back for the sum of twenty-five cents, which was all that he could legally charge this lady for taking her acknowledgement to a dying statement.

The justice knew that there was a mystery hanging over the old stone mansion of Colonel Brewster. The Colonel, when quite an old man, had married a very young girl of whom he had been made guardian. There had been strange doings at the old mansion, and strange suspicions hovered about the place. People were known to have entered that mansion who were never seen again.

In less than half an hour the justice was on his way through the blinding blizzard and the fast accumulating snowbanks on either side of the road, on his way to take the midnight deposition.

The justice of the peace is thus spoken of in the British Encyclopedia: "In England he is appointed by a special commission under the great seal to keep the peace within his county." Lord Coke said, 'the whole Christian world hath not the like office as justice of the peace if duly executed.' The justices perform their work with but slight reward. Their duties are the keeping and causing to be kept of ordinances and statutes for the good of the peace, to inquire the truth by the oath of good and lawful men. They cannot act beyond the limits of the county. A justice improperly refusing to act on his office, and acting falsely and corruptly, may be proceeded against. A justice refusing to act may be compelled to do so by the high court of justice." In the United States justices of peace are sometimes appointed by executive and sometimes elected. The duties of this official vary in the different states of this country.

Horticultural Brevities.

In discussing the apple marketing problem at the Western New York Horticultural Society meeting Professor John Craig gave as his belief that the largest and most satisfactory returns will come from selling high grade apples in local markets.

Professor John Craig advises using Mammoth clover as a cover crop for orchards.

George T. Powell told the western New York fruit growers at their recent meeting that the brown-tail and Gypsy moths have already cost the state of Massachusetts \$2,000,000 and it will require \$10,000,000 to eradicate the two moths from the state.



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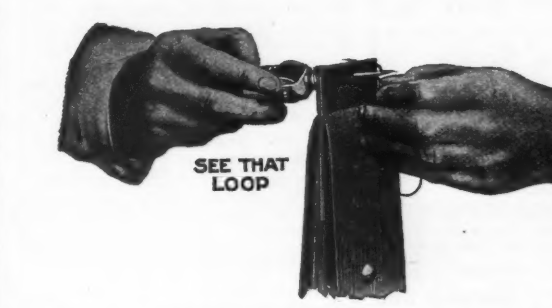
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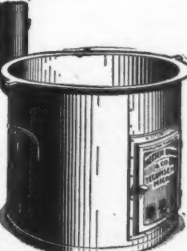
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NOTE—After thread has been forced clear through the leather release the thread spool as shown in the illustration, and draw out twice the amount of thread as will cover distance you intend to sew, leaving needle stationary until thread has been drawn out. Then withdraw the needle, holding the thread firmly in left hand, merely allowing enough thread to go back to release needle to start new stitch. Proceed as in cut.

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SMALL FRUIT DEPARTMENT

Strawberries—Summer Pruning.

This practice is not as general as it should be, and is one of the reasons we find so much inferior fruit in the strawberry crates, says "Up to Date Farming." Pruning should be severe the first year, and of a different character thereafter. During the first year of the independent life of the young plants, the rule is to keep off all runners and bloom, but I have produced as good results by allowing one fruit-stem to a plant, and pinching off all but six of the first berries formed. This does not tax the young plant appreciably, and gives a small crop of very choice berries, and enables the grower to get a line on his plants, and to determine whether special fertilizers, and special treatment, are giving expected results. The pruning is done to enable the plants to devote all their strength to producing a healthy crown and root system. After the first week of August, the plants should be stripped of their outer leaves, which should be burned, and a good commercial fertilizer applied around them, and cultivation be con-



Strawberries growing in the orchard of C. L. Steed, Ohio, a subscriber of Green's Fruit Grower for many years. This patch contains about one acre. He sold over a thousand dollars' worth of strawberries since it was set in 1902. The apple trees are six years old.

tinuous, especially in those sections where moisture is scarce at this time.

By the first of September the winter mulching of straw may be given if convenient, but I think it is better to give it when the ground is frozen hard enough to bear a man's weight. This mulching is allowed to remain during the second season until the crop is harvested, when it is worked under with the shallow-plow. During the second season the runners are kept off, excepting when growing by the matted-row system, when enough are allowed to root on the rows to allow the plants to stand six inches apart—the best being removed.

When the blooms are set, the plants should be gone over and any excessive number of the last ones set be removed, in order that the fruit will grade evenly. It is better to have twenty per cent. less fruit, and have it fifty per cent. better in size and quality. The leaf-pruning in the fall may be done in large plots by mowing with a scythe, the leaves being raked off and burned. During the following seasons the plants will require stimulating, and cultivation, and more severe elimination of buds, as they will not bear as many perfect fruits in any one season after the second.

This depends very largely on your market as some sections prefer size. While others require the berries to be red to the very tip; all require firm berries.

Red Cross.

Among currants, Red Cross has given the best yields the past year. In raspberries, the past season was the banner year, the entire crop being gathered, owing to favorable weather conditions; the Welsh was the best variety of the red, Black Cap the best of the blacks, says "Country Gentleman." The Eldorado was the best early blackberry; Ward was also a profitable sort to grow. Peaches were a very heavy crop on almost all trees, but the season was unfavorable for the perfection of the fruit, much of it rotting on the trees. Crawford Late, Elberta, Iron Mountain and Champion were the best sorts. The

Kieffer pear crop was large, but the quality not as good as in some years; prices, as a general thing, were good for the quality.

New York Grapes—Output of 5,750,000 Baskets Last Year.

About 5,750,000 baskets of grapes were shipped from the Lake Keuka district the past season. This represents one of the largest, if not the largest yield since grapes were first planted in the district, says Rochester "Democrat and Chronicle." The unusual quantities on Lake Keuka helped out a number of buyers who otherwise would have had a poor season. By this is meant those who come here each year to buy apples and other tree fruits, which were very scarce last year in this locality.

The vineyard is thoroughly plowed, and frequently, according to modern ideas, harrowed. The best vineyardists advocate plowing twice each season, the time of each year at which to plow depending very largely upon rainfall.

A first class spraying machine has become one of the necessities on a vineyard, and, beginning about the middle of July, a vineyard is sprayed with a solution of sulphide of copper. The acid, which would otherwise burn the foliage, is neutralized with lime. This is called bordeaux mixtures, and is universally used in this country and all through Europe. The solution is pumped by power from the wheels of the machine, which is drawn by two horses. There

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fruits and field crops with best effect—least expense—less time, for biggest profits. No other sprayers as good as Brown's Hand and Power

AUTO-SPRAYS

40 styles, sizes and prices and valuable spraying guide in our book, sent free for name on postal. Choose any auto-spray—it is guaranteed to satisfy you completely.

Used by the U. S. Government and State Experiment Stations and 300,000 others. Auto-Spray No. 1—Ideal outfit for 5 acres of potatoes or 1 acre of trees. Auto-Spray No. 11 best for larger operations. We have Auto-Sprays for largest orchards and fields. Write now for valuable book.

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Uncle Sam Says: "Spraying Pays"

Our Government carefully studies spraying—says it pays big. Many officials say that no machines are quite equal to

DEMING SPRAY PUMPS

—used by Experiment Stations and Field Experts everywhere. "Efficient and satisfactory."—Pa. State College. "Highly recommended."—writes the Asst. Entomologist of Tenn. Catalog free. Ask your dealer.

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Six Row SPRAYER Horse or Hand

Over 1,000 up-to-date farmers and fruit growers are using the Perfect Sprayer, the oldest and most reliable sprayer made. Sprays 6 rows of potatoes or vines at once with horse power. Trees are sprayed by hand. Agitates perfectly, pressure always strong. Easily changed from horse to hand power. Don't buy any sprayer till you



Write For My Catalogue FREE

THOMAS PEPLER,
Box 18
HIGHTSTOWN, N. J.

Lighting Sprayers & Spray Pumps. 15 different styles. Hand, compressed air, dry powder, whitewash sprayers, bucket and barrel pumps. For spraying potato vines, garden vegetables, disinfectants, trees, shrubbery, whitewashing poultry houses and stables, washing wagons, windows, etc. This line cannot be excelled. Big inducements for agents and something new. Write to-day for descriptive catalog and agents' proposition. Manufacturers of all kinds of sprayers and spray pumps.

D. B. Smith & Co., Box C, Utica, N. Y.

Grow Mushrooms

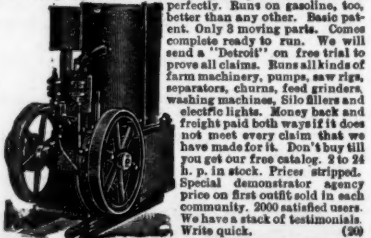
For Big and Quick Profits. Ten years experience enables me to give practical instructions that will add \$5 to \$50 per week to your income without interfering with regular occupation. For full particulars and free book, address **JACKSON MUSHROOMS, 5636 N. Western Ave., Chicago, Ill.**

Try Kerosene Engine

30 Days Free

Gasoline Prices Rising.

You can't run a farm engine profitably on gasoline much longer. Price of gasoline going sky high. Oil Companies have sounded this warning. Kerosene is the future fuel and is now 6c to 10c a gallon cheaper than gasoline. The Amazing "DETROIT" is the only engine that uses common lamp Kerosene (coal oil) perfectly. Runs on gasoline, too, better than any other. Basic patent. Only 3 moving parts. Comes complete ready to run. We will send a "Detroit" on free trial to prove all claims. Runs all kinds of farm machinery, pumps, saw rigs, separators, churns, feed grinders, washing machines, silo fillers and electric lights. Money back and freight paid both ways if it does not meet every claim that we have made for it. Don't buy till you get our free catalog. 2 to 24 h. p. in stock. Prices stripped. Special demonstrator agency price on first outfit sold in each community. 2000 satisfied users. We have a stack of testimonials. Write quick.



The Amazing "DETROIT"
Detroit Engine Works, 191 Bellevue Ave., Detroit, Mich.

ly, and many of the growers who formerly sent their shipments to market by boat now draw them directly to the loading houses. These wagons will carry 1000 baskets over the roughest roads without the breaking of a berry.

Every state in the Union except California is shipped to from here. A large dealer has an agent in every city in the United States of 10,000 population or over, excepting again California. These agents sell Lake Keuka grapes exclusively. From 5000 to 6000 baskets are carefully packed in each car. These cars are iced in the warm season, icing being done in five minutes by the use of improved machinery and slides. The biggest train of grapes ever sent out from here by one individual shipper consisted of twenty-four cars, each car containing 5000 baskets. The largest shipper in the district is William N. Wise, of Penn Yan.

Questions Asked and Answered About Orchard Planting.

Is there any need to harrow the ground besides plowing it for trees?

Reply: Yes, fit it as for sowing or planting.

Will trees thrive if planted in turf plowed up this spring and well harrowed?

Reply: Yes, if planted with greater care. No sods must be placed near roots.

Reply: Yes, if soil is not soddy or rocky.

Do berries, plums and pears grow better on the top or sides of a hill than at the bottom, provided all is equally well drained?

Reply: No, but they bear more fruit on elevated sites.

Is 30 feet apart ample for all apples?

Yes. Or should some of the following be further apart and some closer? Indicate opposite the names which grow into the largest trees; also the average life of apples—100 years. Plums—50 years. And dwarf pears—50 years.

How late can trees be set out in spring?

Reply: Up to June 1st for New York.

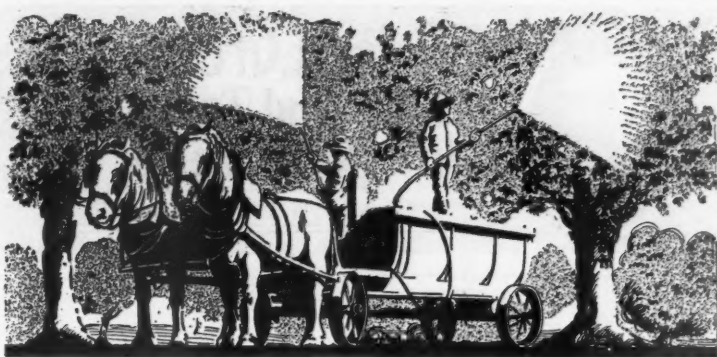
C. A. Green.

Birds Helpful.

C. A. Green: Your articles on bird life and of the denunciation of destroyers of birds are all too few. Let us have more that will cause the birds to have more friends and protection. That little article in the last number, about the destruction of the robins in South Carolina is hard to believe. If it is true, for Heaven's sake give us some strong articles condemning such things.

—O. R. Schleicher, Illinois.

C. A. Green's reply: It is a fact that our song birds, and many birds that feed on destructive insects that are not



BIGGER PROFITS

Spraying can no longer be considered by the up-to-date grower as an expense. It is rather an investment. The man who sprays his orchard systematically and with the proper materials is sure to have a larger crop and more perfect fruit than the man who does not spray.

SHERWIN-WILLIAMS NEW PROCESS ARSENATE OF LEAD

will help you secure bigger profits on your orchards because its application will insure a much larger percentage of fruit that is good and therefore of higher market value to you. S-W Arsenate of Lead is light in gravity and remains well in suspension so that a uniformly poisonous spray can be thrown from the finest nozzle. It is sure death to all leaf-eating insects. Write for booklet to



THE SHERWIN-WILLIAMS Co.

MAKERS OF HIGHEST GRADE INSECTICIDES AND FUNGICIDES
675 CANAL ROAD, N. W., CLEVELAND, OHIO



Please mention Green's Fruit Grower.



Picking Corsican strawberries in the C. L. Steed orchard, another view.

Is it sufficient to go over turf plowed up last fall with a disc harrow or cut-away, without replowing?

Reply: Yes, do not replot. Work it over and over with great care.

Do trees so planted, or planted where there was corn last year, require manure at time of setting out, or any time after planting?

Reply: No, except a forkful on surface around each tree as a mulch.

Is there any device for digging the holes (with a machine)? No. Or is it best to use a corn marker and cross plow? Yes, planting at the intersections. How wide and deep should hole be dug to give the roots of apple trees proper space?

Reply: I do not cross plow, but simply dig the holes so as to make each tree stand a little deeper than in nursery row.

On hilly ground I presume care should be taken to cultivate in terraces, to prevent washing away of earth?

Reply: Not always.

How many first grade trees should three men plant per day, after the ground has been prepared but no holes dug?

Reply: Apples, 200 to 300. Peaches, 200 to 300. Dwarf pears same. Plums same, in sold ground you mention could not plant so many. Some men would plant many more than above.

How many men is it best economy to use in setting out an orchard? State what duty or work to assign to each man at the job.

Reply: One expert and two assistants, but there are some experts who could manage twenty men.

If apples trees are planted 32 by 26 or 28, triangle style, and fillers used between the 32 by 26 row, that is 16 feet apart, will 26 feet be far enough apart for the apples when full grown?

Reply: Thirty feet would be better.

If trees cannot be planted within several days after arrival should they be trenched or left packed in crates?

Reply: Left in crates in cellar. Keep roots moist and covered.

Is it advisable to cultivate raspberries, currants, etc., between the young apple trees?

songsters, are ruthlessly slaughtered not only in the south where they collect in large numbers during the winter months, but in every part of this broad land. The mass of our people are not well informed in regard to the helpfulness of birds. It is difficult to teach people that birds are helpful to every farmer, fruit grower and gardener. The fact is that if all the birds should be destroyed, millions of human beings would die of starvation owing to the increase of insects.

For seven years I have celebrated Bird Day in this city annually with music and speeches in some hall or park, hoping thus to interest and instruct our people in regard to the necessity of protecting and preserving bird life, but I find that it is up hill work. Even the local press is not fully awake on this subject, although they give me liberal notices at each annual Bird Day celebration.

The National Audubon Association of New York city is constantly sending out literature calling attention to the necessity for the protection of birds. There are some good results. The United States government has established bird preserves in several of the states, notably in the south, consisting of large tracts of land where no one is allowed to kill a bird, but while this is good work it is but a drop in the ocean of preservation. Birds have many enemies beside man, but I consider man the birds' worst enemy.

Young Strawberry Plants Rooting.—Mr. Rodes Brown asks how soon the new strawberry runner may be transplanted after it has begun to take root.

C. A. Green's reply: By careful treatment the plant may be taken up as soon as the roots are an inch or two long. In this condition I transplant them in two inch beds, in order to make potted plants, severing them from the parent plant. But when transplanted so early the young plants must be shaded and watered daily. When the young plant has made roots four to six inches long they may be taken up on a moist day and transplanted in the garden row with a spade.

GASOLINE PUMPING ENGINE

It costs about ONE CENT AN HOUR to pump water with this engine. If your time is worth more than a cent an hour you cannot afford to pump by hand. It will raise 32 barrels of water per hour to an elevation of 25 feet, 10 barrels to an elevation of 100 feet, or proportionate quantities to other heights.

This engine can be connected to "any old pump" in 30 minutes. After you have watched it pump water for five minutes you will wonder how you ever got along without it. The longer you have it, the better you will like it. It is right on the job all the time. A turn of the fly-wheel and it is off. A child can operate it. The ladies often start it to pump a pail of water. They rest while it works.

It is shipped complete with walking beam, supporting frame and everything ready to set it up in complete working order, except three stakes for driving in ground. Next to a windmill, this is the most economical outfit for pumping. We are selling many thousands of them every year, but our sale of Aeromotors is still increasing.

A PULLEY for running cream separator, churn, washing machine, ice cream freezer, grindstone or other light machinery is furnished with this engine for \$1.50 extra. If you need an engine for pumping large quantities of water for irrigating, watering large herds of stock, or for other purposes, our Heavy Back-Geared Pumping Engine for \$100.00 is just the thing you have been looking for. It will raise 125 barrels of water an hour to an elevation of 50 feet, or proportionate quantities to any height. Our \$75.00 2 H. P. General Purpose Power Engine with Fluted Cooler is the best thing going. Larger sizes at proportionately low prices.

\$37.50
F.O.B. Chicago

AERMOTOR CO.,

2510-12TH ST.,
CHICAGO.

Please mention Green's Fruit Grower.

More and Better Fruit and Vegetables

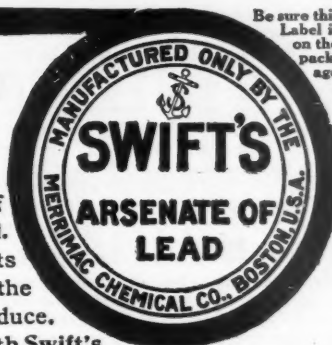
That is *always* the result of using Swift's Arsenate of Lead. It destroys all leaf-eating pests so that the whole vitality of the tree or vine goes into the produce.

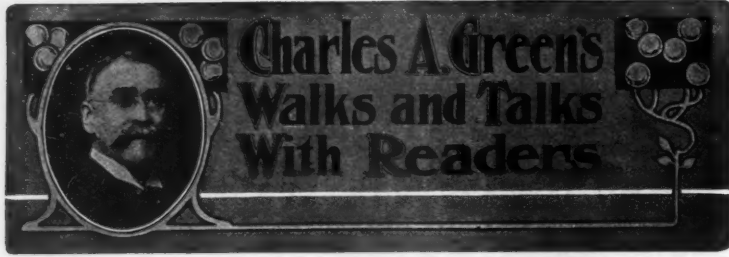
Spray your trees and vines with Swift's and you will get a bigger and better yield. It has made thousands of apple trees give 100% clean fruit. It is equally good for vegetables and small fruit. It never burns or scorches. Mixes readily with water, stays in suspension and does not clog the pump. One spraying with Swift's often outlasts two to four sprayings with other materials that are washed off by rain.

Send for valuable book on leaf-eating insects. Give your dealer's name.

Merrimac Chemical Co., 45 Broad Street, Boston, Mass.

Please mention Green's Fruit Grower.





ROCHESTER, N. Y., MAY, 1910.

Noise is often mistaken for ability.

A full stomach gives us a dull mind.

Sick people get more advice than they can use.

Truth is more valuable than gold or diamonds.

Is it natural to be honest? We know it is wise.

A cook can never establish a reputation among dyspeptic boarders.

Advice is considered cheap for the reason that so many offer it freely.

Wisdom is shown in our ability to accept wise advice or to reject bad advice.

I would rather possess the ability to recognize truth than to own the whole world.

Our nerves are said to be weak when in fact that are so strong as to overpower us.

There is one good thing about money. The man who has plenty of it must keep moving and thinking.

In old times men carried swords for protection. Now the government carries the sword for us.

The day will never come when all the bad men are jailed and all the lunatics placed in an asylum.

We recognize that there are disagreeable people, but it is hard to realize that we may be one of them.

An act of kindness is not easily forgotten. Even the horse, cow, dog and cat remember acts of kindness.

Some things, like particles of cement, are valuable in uniting and combining, while others, like dynamite, are valuable in disuniting or rending into fragments.

Be brief. Tell short stories, preach short sermons, write short letters. This will give you time to kiss your wife daily and to become acquainted with your children.

Paralysis.—My doctor says that paralysis is the result of the bursting of a blood vessel. Paralysis may be warded off by eating less food, particularly of meat, by eating slowly, by masticating thoroughly, and by taking exercise each day in the open air. The blood vessels are weakened by continuous thought on one subject. Break up this by innocent games and by a change of occupation.

Never buy a horse without severe testing of wind (lungs). Have horses driven fast and long, then stop and put your ear to neck and chest of horse. No one here thinks to do this. Post this so it will not be overlooked. Look horses all over. It is a big job to buy teams, requires an expert, a veterinarian doctor, in fact. At present prices we must not buy unless we know horses are sound and not doctored. Close the nostrils a few moments, then if horse coughs, his lungs are bad.

Reply to Mr. Geo. A. Tefft, Conn.: Thanks for \$1.00, which entitles you to Green's Fruit Grower for three years and Green's booklet. We comply with all your requests.

Land on which sorrel grows is likely to be sour land. The acid of the soil can be discovered by burying in it a small piece of litmus paper which can be secured at all drug stores and is not at all expensive, one cent's worth is enough. The druggist will tell you how to use it to test acid in soil.

Alfalfa in the East.—Alfalfa is a grass or clover valuable for feeding horses or other live stock. Alfalfa has long been grown in the west where it has proved to be of great value. In Kansas it produces three or four valuable crops each season. It sends its roots deep down into the subsoil thus

when plowed under enriches the land and the holes made in the subsoil by the roots gather drainage for the soil. Alfalfa has not been so largely grown in the eastern states. Possibly it is just what we need here to help out our supply of fodder and for enriching our soil.

Death in Money.—A dirty one dollar bill was recently examined by a chemist and thousands of germs of diseases were found on this bill. There were germs of diphtheria, grippe, typhoid fever, scarlet fever, etc. Remember that money passes through the hands of thousands of people in a few weeks. The hands of many of these people handling the money are dirty, thus day after day germs accumulate on the paper money until finally it is loaded down with germs of disease. Never handle any food after handling money without thoroughly washing your hands. Silver and gold coin are not so likely to gather germs as paper money.

Nitrate of Soda.—Mr. E. J. Sanderson, of N. H., asks how much nitrate of soda should be applied to each tree but he does not state the size of the tree. If the trees in the orchard are in bearing I would sow the nitrate broadcast over the entire surface of the soil. If one tree is standing in lawn or garden I would scatter the nitrate thinly over the space shaded by the branches. It is not well to apply nitrate of soda heavily at one time. If the tree is recently planted half a teaspoonful of nitrate of soda will be helpful scattered on the surface of the soil within a radius of three feet around the trunk of the tree. In a bearing orchard five hundred pounds of fertilizer per acre would be helpful, but more or less could be used according to the needs of the soil. My plan is to supply a little each year rather than a large quantity at one time as this fertilizer is not held in the soil permanently as is potash or phosphoric acid.

Conserving Soil Fertility.

The time is not far distant when this country will be compelled to make available every form of fertility that will enrich the soil. The people of India, of China, and of Egypt were long ago compelled to make use of the fertility which in this country is thrown into the rivers, lakes and harbors through town and city sewers. If those eastern people had not made such use of fertility starvation would have ensued.

We should take this question into consideration in making plans for the disposal of city sewage. The usual recommendation of expert engineers is that the sewage of cities be emptied into lakes or streams.

The danger of such propositions is first that state laws may be enacted prohibiting cities from polluting streams, lakes and harbors with sewage. The second danger is that our national government will awaken to the necessity of conserving the fertility of the land by applying to the soil all of the fertility which now goes to waste through our sewers.

Pain and Pleasure.

Years ago there was a sect known as Utilitarians. Their religion consisted of doing things for utility. That is their object in life was to prevent pain, sorrow and trouble in all its phases and to promote pleasure and joy.

John Stewart Mill, one of the wisest of men, belonged to this sect. He finally asked himself, "Would I be happy and contented if I should succeed in abolishing pain or sorrow?" and he found that the answer was No, he would not be happy and contented, therefore, he said to himself, "Why should I continue to be an utilitarian?" and he abandoned that sect.

When war is proclaimed and patriots are asked to go to the front and defend their country these men do not ask whether they will be happy there or whether they will be unhappy. They go to war knowing that they may be hungry, may have to sleep outdoors in the rain and be exposed to long marches

to seek death. It should be the same with our course in life. We should expect to suffer but should be satisfied to be one of a great army in the hands of a great Commander marching on with the desire to do some good.

Green's Fruit Grower in the State of Washington.

At a meeting of the Spokane County Horticultural Society Professor W. S. Thornbur, of the Washington State College, the head of the horticultural department, urged all fruit growers to subscribe for one or more horticultural papers or magazines. When he had finished an energetic looking man spoke up and said, "I am taking Green's Fruit Grower and find it good enough for anybody."

"Yes," replied the professor, "Green's Fruit Grower is good enough for anyone and I would advise you to all add it to your list of literature on horticulture and agriculture if you have not already done so."—G. H. Watson, Washington.

Planting Rocky Hill Side.

Miss Leah Berkeimer, of Bedford county, Pa., thinks of buying twenty-seven acres of land on a hillside southeast in exposure. Half of this land is very high and steep. The soil is composed of slate, clay and gravel. She wants to know if it will pay to plant grapes, peaches, apples on such land. The land has not been cultivated for eight or ten years. Some of it is entirely new ground. Would sawdust mixed with commercial fertilizers or manures be helpful?

C. A. Green's reply: An elevated site like that you mention often makes the most productive orchards and vineyards, but the difficulty of cultivation should be considered. If the land is too steep to be cultivated I would not plant fruits there. The fact that the soil has been abandoned for so many years indicates that it is not very fertile and that it is difficult of cultivation. I should prefer a few acres of good land that was better adapted to cultivation, than a larger tract of rocky land that has been abandoned for farming. Especially would I advise this for a lady who would be much better off with one acre of good garden soil known to be fertile and productive than to have a hundred acres of poor soil on the side of a mountain, and yet it is possible that a skillful man might be remarkably successful in fruit growing on this hillside.

We do Wicked Things.

This is a hard world. We are compelled to do heartless deeds. We may have a horse which may have been in the service of the family for twenty years, which we have learned to love and which seems to have an affection for us. Through old age the horse has ceased to be useful. We inquire as to what shall be done and find that the most merciful thing to do is to shoot the horse, or in some other way destroy its life with the least pain possible. We may have a pet cow which has been pastured on our lawn for many years and has welcomed our caresses as those coming from a friend. This cow has nourished us throughout the years with her rich milk. She is now too old to do further service and the question is raised, what shall we do with her? The solution of this question is similar to that of the old horse, which is to destroy her life as painlessly as possible. We may have had in the family a dog that has grown old and decrepit. This dog has been the playmate of father, mother and children for many years, and has been a protector of the home. He would have given alarm if the house had been on fire, or if it had been attacked by thieves, and would watch the house during the absence of members of the family even more faithfully than a policeman. What shall be done with the old dog in his declining years?

We may have had in our family a faithful man of all work, a caretaker, one loved and respected by all. This man is crippled with age and weakened with disease so that he is no longer of service. What is to be done with him? We may have had in our family a household servant, a good Christian woman who has long been of great service to every member of the family, but is not capable of doing further service. She has not been able to lay by any of her savings. She has no immediate relatives. She must be dependent upon someone. What shall be done with this old household servant?

There are many similar questions that come up in the life of every man and woman, each one of which seems impossible of solution to our entire satisfaction. If we, in cold blood, kill the faithful horse, cow or the dog, if we allow the old man servant, the care-

taker of the house to suffer in their old age, or to go to the poorhouse, we will be little better than barbarians. Some have asked is it possible for a follower of Christ to conduct business enterprises? The answer usually given is that it is possible but difficult. Then again the question is asked is it possible to be Christlike and treat the old worn out servants as they are usually treated? Here is food for the thoughtful.

Large Yields of Strawberries.

It is surprising to many people to learn that almost as many bushels of strawberries can be produced on an acre as an acre will yield of potatoes. One reason for the universal surprise at the possible yield of an acre of strawberries is that it is not taken into account that there is a succession of crops of strawberries on the same plantation during one season extending through several weeks.

A lot of berry pickers may go over an acre tract of strawberries for the first picking. They gather all of the ripe berries and may pick ten, twenty or fifty bushels in one picking from this acre. Two or three days later these same pickers will pick from this same patch another lot of strawberries bearing from ten to fifty bushels according to the methods of culture and skill of the grower. Thus there may be three or four pickings during the year and the picking may be continued for two or three years, thus there may be from five to ten pickings of strawberries from this acre of land.

But when we dig an acre of potatoes we dig the entire crop at once, therefore it would seem to the potato grower that no acre of strawberries could ever yield so many bushels of fruit as there would be bushels of potatoes. There is the greatest opportunity for skill and good judgment in growing a prize acre of strawberries. First the character of the soil and the drainage either natural or artificial. Some may say that they prefer a sandy soil and some sandy soils may produce twice as many bushels of strawberries per acre as other sandy soils. Others may say that they prefer a clayey soil and yet some clayey loams may produce twice as many bushels of strawberries as other loams.

Then consider the question of fertilizers or manures. The soil should be enriched with manure at least one year previous to the planting of a prize acre of strawberries. Possibly the prize winner will fertilize this acre with applications of barnyard manure for five years in advance, applying some of the manure each year until at last he has the soil in precisely the condition desired with a good supply of humus. Then there is the question of variety. There are some varieties of strawberries that will produce twice as much fruit as other varieties. Then the prize winner will have to contend with the season which may be excessively dry or excessively wet, or for some reason a portion of the strawberry blossoms may have become blasted producing no fruit.

Several well known strawberry growers have recently reported in the "Rural New Yorker" their largest yields of strawberries. It was claimed that the late J. M. Smith, of Wisconsin, never quite reached 400 bushels of strawberries per acre. But he produced 111 bushels from one quarter acre. Eight thousand quarts of strawberries were produced on an acre of another grower who believes that much larger crops can be produced. He thinks 3000 quarts per acre is about the average yield.

Another grower mentions a yield of 250 bushels of strawberries per acre that sold at \$3.00 per bushel or \$750.00 for the fruit from one acre. He thinks he would have no trouble in growing 150 bushels of strawberries per acre on the right kind of soil properly cared for and fertilized.

Another grower thinks it would be impossible to raise 50,000 quarts of strawberries on one acre in one year. He has secured 1200 heaping quarts from one eighth acre. E. W. Wooster, of Maine, said he marketed over 38,000 full sized quart baskets of strawberries from five acres. He estimates that two acres of the five yielded not over 5000 quarts.

Rose Bushes.—The leaves of rose bushes are liable to attacks of thrip and other insects which leave simply the skeletons of the foliage. A paris green spray applied to the under side of the leaves as well as to the upper side will be helpful. Later in the season rose bushes are attacked with aphid or plant lice which gather at the ends of the new growth. Kerosene emulsion is the remedy for this or strong tobacco water.

WALKS AND TALKS—Continued.

A Variation of Baldwin.

Mr. M. A. Barber, of Warsaw, N. Y., tells Green's Fruit Grower that many years ago he bought ten Baldwin apple trees and planted them on his farm. All of these trees lived and have borne fruit abundantly. Four of the trees produced apples more highly colored than the other six trees. He considers the fruit of these four trees of better quality and higher color than the average Baldwin, and the fruit keeps longer than the Baldwin. He says they are in their prime from April to July. He has several times brought samples of these apples to the office of Green's Fruit Grower. We find them of a brighter red color than the average Baldwin but neither our editor nor Prof. Van Deman nor the agricultural department at Washington can decide that they are anything further than Baldwin. This experience reminds us of the fact that there are certain trees of Baldwin, Spy and Twenty Ounce the fruit of which varies from other trees of the same varieties in the size of the fruit, in its color and sometimes in its shape. I have in mind a tree of Twenty Ounce grown at Hilton, N. Y., the fruit of which would not be recognized as Twenty Ounce apples.

The "Country Gentleman" speaks as follows on the subject: "During our attendance at the fruit growers' meeting at Poughkeepsie, we met Mr. P. W. King, of Athens, who had an apple for name. It was shown to several fruit growers, but they did not recognize it. We offered to send it to an expert, and did so. He replied that it was a Baldwin. Mr. King, who is a fruit grower, writes: 'I know the tree from which the apples were plucked. It has not the characteristic shape of a Baldwin apple tree, nor is the young wood like it, except somewhat in color. It is more like Rhode Island Greening in shape of top and habit of branching. I am eating juicy Baldwin apples every day, but have never seen one much resembling those given you, in color, flavor, or texture of skin or flesh. In the "Apples of New York," Vol. I, p. 60, there are noted varieties of Baldwins differing more or less from the standard type, and, it is possible this may be one of these. But if so, it has so far departed from the ordinary type that it differs largely in almost every particular. I showed the apples to several large apple growers at the Poughkeepsie meeting, but not one of them suggested they might be Baldwins.'"

The apple named by C. A. Green, "Green's Baldwin," is much like that of Mr. Barber's, but the growth of tree and foliage differ from the old Baldwin. It is more rapid and upright in growth.

Age of the World.

This is an old world, and yet in some respects it is new. There are scientists who claim that the earth is 200,000,000 years old. There is positive evidence that it is 60,000,000 years old. This evidence is found largely in the rocks and in deposits of coal. The trunks of great trees have been discovered deeply buried in beds of coal. In strata of rock, the age of which can be established, impressions are found of flowers, ferns and trees. The petrified forest of Arizona testifies to the great age of the earth. These trees now turned to agate, after growing upon the earth, were buried by subsidence of the earth deeply under the sea. In this position hundreds of feet of sand covered the forest growth. After the lapse of possibly millions of years the land which had sunk beneath the ocean was upheaved again above the level of the sea. Then the action of frosts and storms of many ages removed the covering of rock into which the sand had been changed and now we have the petrified forest exposed to view.

This is a new world to us for our own country was discovered within the last few hundred years, and there are portions of the earth yet undiscovered. We have but recently discovered the North Pole region. But it is possible that other races of man have discovered this part of the earth's surface previously and that other races of men have cleared the land, built up cities and engaged in universal agriculture and horticulture.

Think for a moment of the earth having continued on its journey, and on its journey with the sun through space, at the speed of a cannon ball for over 60,000,000 years without halt or friction, floating like a soap bubble without visible support, and never coming into collision with other heavenly bodies, though millions of other bodies all larger than the earth are visible in every direction.

Many people fear that the earth will collide with Halley's comet or some other similar tramp orb of space, but since the earth has met with no such accident during over 60,000,000 years, we are reasonably safe in assuming that the earth will continue her course for millions of years more. But there will come a time when the earth will cease to exist. Being the smallest of the planets there will be no serious commotion when the earth is wiped off from the map and has sunk into the sun and become a part thereof. At this period when the earth has disappeared and exists no longer we may ask what was the design of God in creating the earth and inhabiting it with man and the myriads of other creatures, and what will become of the spirits of the thousands of billions of human beings who have lived upon the earth throughout all the ages, assuming that each of these individuals has eternal life?

Deafness and Blindness.

There are many deaf people who might have preserved their hearing had they taken immediate steps towards this end when trouble was first discovered. It is human to delay, to postpone, to put off the doing of important things until it is too late. Buildings burn, health is lost, fortunes are wasted by the lack of prompt action. If anything is wrong with your hearing consult a skillful physician without a moment's delay. I have known men to permit the ear to be stopped with ear wax for a year or more without doing anything to prevent the approach of deafness, though a physician could remove the wax in a few moments by syringing the ear. You could not do this work yourself unless very persistent. The water must be forced into the ear severely, but not severely enough to injure the ear drum. After the wax has been there for a long time it may take an hour or more to remove it, or it may take several operations of the syringe. There are many other causes of deafness. Sometimes the ear drum is caused to burst by a loud noise or explosion. In such cases there is no remedy. I assume that half the cases of deafness might have been prevented if a physician had been consulted in time.

Blindness.—While it is a sad affliction to be deaf it is a greater affliction to be blind. My friend had good eyesight. He went to the Alaska gold fields where the glare of the bright sun on the snow was forced back into his eyes, blinding him for life. Do not strain the eyes by reading in the twilight or by dim lamp light. Never put anything into the eye, that is in contact with the eyeball. Salt diluted with water, or boric acid diluted with water, may be applied to the eye lids when closed, but an experienced oculist tells me that the rule of his life is never to apply any remedies to the eyeball itself, unless in cases of great emergency, and then only with the advice of a skillful physician, that is an oculist.

A Child of Adoption.

My mother was ever adopting girls and my father was ever adopting boys. And yet there were seven children in our family. Many of these adoptions were not a success. This I think was owing largely to indiscretion or hasty decisions on the part of my parents. During the latter years of her life my mother adopted a little girl about five years old. This child was seemingly as dear to the hearts of my father and mother as one of their children. This child of adoption developed into a noble christian woman, who did much to make the later years of my father's and mother's lives years of happiness and contentment.

Why should not you and I adopt a boy or baby girl? We have reared a family of children. They have grown to maturity, have married and have left us. Why should we not brighten our home and do something for humanity by adopting a child? A neighbor of mine went to the poorhouse in search of a child for adoption. He found a little red cheeked baby boy that took his fancy and he adopted the child. This child developed into a man of marked ability, who finally became famous not only through his own state but elsewhere as a man of ability, wise beyond his generation and just. Recently a charitable institution in the south wrote the editor of Green's Fruit Grower that in the institution was a baby boy and the child would be given to some worthy family for adoption. I announced this fact in the pages of Green's Fruit Grower but never heard what was the result. The object of this article is simply to suggest that if the reader's children have grown up, and the father and mother are left somewhat lonely in the home, they adopt a child.

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Words fitly spoken are like apples of gold in baskets of silver.—Proverbs.

The Coming Race.

Tell me, mother, is it really true, as jokers love to state, that when you were young as I am you had meat to masticate? People tell such funny stories. Things that cannot be, you know, so I thought I'd ask you, mother, if this fairy tale were so.

Tell me, mother, are they joking when these foolish people say you had butter on the table? Sometimes even twice a day? Eggs, I know, were once quite common. This I learn from books I read. But that you ate meat and butter seems incredible, indeed.

—New York "Sun."

Wed and Live Long.

"Marry if you want to live to a good old age," says Dr. Bertillon, who is possibly the greatest living authority on the sexes, in the N. Y. "Times," and gives his reasons with statistics to back them up. "The married man or woman has," he says, "thrice as much chance of a good, long run of life as a bachelor or spinster."

Dr. Bertillon shows also that mortality among widowers is greater than the average among married men; so he recommends them to marry again, provided they are under sixty years of age.

The figures on which Dr. Bertillon bases his advice are not peculiar to France, for he explains that his father, who also made a study of the question, got statistics from Germany, Austria, Italy, Sweden, Holland and Belgium, which completely bear out his opinion, while he himself has studied the matter in France. To young men Dr. Bertillon has this to say:

"Marry and you will do well even from a selfish standpoint; but watch carefully over your wife's health as, even from this egotistical point of view, her loss will be a terrible misfortune; for your life depends in a great measure on her own."

To women his advice is:

"And to you, mademoiselle, I give counsel to marry in your most selfish interest, as mortality among married women is less than among spinsters of the same age, at least after the age of twenty, but the difference is less for women than for men. The mortality among spinsters is much greater than among married women, but it is not

twice as great as in the case of men."

Next comes the widow: "Mortality among widows is distinctly much greater than among married women of the same age. 'The sweet state of widowhood' is, on the contrary, fatal to young widows. Their death rate, from twenty to twenty-five years of age, is twice that of married women at the corresponding age."

Then Dr. Bertillon goes on gallantly to say that women have less need of men than the latter have of them. He says that the death rate is generally less among women than with men of the same age and station. What is the reason? Simply that they are steadier. And there is no doubt, for the same reason, that matrimony conduces to longevity.

"Married people lead a more regular life," he says. "They are more controlled, discreet though this control may be, and it must be discreet if it is to be useful. Their physical life, like their moral life, is healthier, quieter and more natural."

"Other explanations may be assigned, but, in my opinion, they are not worth this one."

Valetudinarians, weaklings, drunkards, and fast people do not marry so much as others; so matrimony, it is argued, gets the soundest recruits. But this is not a sufficient argument, says Dr. Bertillon. He says:

"If it were, widowers, who are also the elect of marriage, would retain the very low mortality of married men. Well, they have the same death rate as bachelors, and even higher, perhaps. They succumb to the trouble which their loss has caused them."

"Don't smile—that can happen. I have seen instances of this."

Thus does Dr. Bertillon point the moral in French statistics: For one year which he has selected the deaths per 1000 men, among bachelors between thirty-five and forty, were nineteen; while those of married men were only eight; between fifty-five and sixty the figure was forty-one for the former and twenty-three for the latter. With women at the same ages the mortality was corresponding twelve and eight between thirty-five and forty, and twenty-four and eighteen between fifty-five and

sixty. The death rates among widows and divorcees were, respectively, twelve and twenty-one per 1000 women.

White House Recipes.

Delmonico Potatoes.—Reheat two cups cold boiled potatoes cut in dice in one and one-fourth cups white sauce. Put in buttered baking dish, cover with buttered crumbs, add to potatoes one-third cup grated mild cheese, arranging potatoes and cheese in alternate layers before covering with crumbs.

White Sauce.—Two tablespoons butter, one cup milk, two tablespoons flour, one-fourth teaspoon salt, few grains pepper. Put butter in a saucepan, stir until melted and bubbling, add flour mixed with seasoning and stir until thoroughly blended. Pour on gradually milk, adding about one-third at a time, stirring until well mixed, then beating until smooth and glossy.

Steamed Fruit Pudding.—Mix a cup of seedless raisins, the same of cleaned currants, the same of shredded citron, and the same of chopped suet. Dust over four tablespoons of flour. Add four tablespoons of brown sugar and a one-half cup of molasses, into which you have stirred, one-half teaspoon of soda dissolved in a tablespoon of water. Stir in a pint and a half of rolled oats, add two well-beaten eggs, a teaspoon of cinnamon, pinch of nutmeg. Pack into a mold, cover and steam for two or more hours (continuously). Serve with liquid pudding sauce. It is very good.

Queen of Chocolate Cake.—One cup sugar and one-half cup butter creamed together. Take two eggs and yolk of another, add to the eggs two heaping teaspoons of baking powder and beat well. Add this to the above and beat all together; one-half cup sweet milk and one and one-half cups bread flour. Sift in one-half cup of dry cocoa and add a teaspoon of vanilla.

Frosting.—One cup of sugar, one-third cup of water. Cook until it threads, then add one-fourth teaspoon of cream tartar, and a teaspoon of vanilla. Beat the white of the egg to a stiff froth, add to the hot sugar and beat until cold. Spread on the cake when cold.

Welsh Rabbit.—One pound of chopped American cheese, real mild and fresh, makes the best rabbit; one teaspoon dry mustard, one pinch of red pepper, one-half teaspoon salt, one large tablespoon butter, one-half glass tumbler of ale, two eggs. Into the chafing dish put butter. When melted put in the cheese a little at a time, stirring all the time. When cheese has nearly melted add the seasoning which should be well blended together, then add the ale very slowly, still stirring all the time, and you must work quickly. Have eggs slightly beaten and add the last thing. Just as soon as rabbit is thick as a thin cake batter serve on toasted bread or crackers.

Fricassee of Lamb.—Get lamb from the fore-quarter, cut in pieces for serving. Wipe meat, put in kettle, cover with boiling water and cook slowly until meat is tender. Remove from water, cool, sprinkle with salt and pepper, dredge with flour and saute in butter (here you need to use butter). Arrange on platter, and pour around one and one-half cups brown sauce made from liquor in which meat was cooked after removing all fat. It is better to cook meat day before serving, as then fat may be more easily removed.

Tripe Fried in Batter.—Cut tripe in pieces for serving, and boil twenty minutes, which makes it nice and tender. Beat one egg, add one-fourth cup cold water, one teaspoon salt and flour to make a batter, not too thin. Dip the tripe in the batter and fry until a nice color on both sides. If there is any batter left pour it into the spider and cook with the rest. Be sure to have a great plenty of grease in the spider. If you use fresh tripe add one tablespoon vinegar to batter.

Ornamental Frosting.—Whites three eggs, one tablespoon lemon juice, confectioner's sugar sifted. Put eggs in a large bowl add two tablespoons sugar and beat three minutes, using a perforated wooden spoon (purchased at any store keeping kitchen articles). Repeat until one and one-half cups sugar are used. Add lemon juice gradually, as mixture thickens. Continue adding sugar by spoonfuls and beating until frosting is stiff enough to spread. This may be determined by taking up some of mixture on back of spoon, and with a case knife making a cut through mixture. If knife makes a clean cut and frosting remains parted, it is of right consistency. Spread cake thinly.

Caramel sweet potatoes are delicious. To prepare them simply boil and slice the potatoes and dip them first in melted butter and then in granulated sugar. Put into a hot oven, till a coating of brown caramel is formed.

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To keep milk fresh for a day or two try the effects of a teaspoonful of grated horseradish.

To make fowls or meat tender when boiled, add to the water a spoonful of vinegar.

Don't boil meat; steam it, except salt beef. Don't throw away the water; use as stock for soup.

To clean windows use warm water and a little borax. Wipe dry, and polish with crumpled newspapers.

Don't boil potatoes—steam them. When nearly done take off lid of steamer, add salt, cover with cloth.

When the burners of lamps become clogged, put them in strong soap suds and boil a while to clean them.

To brown the upper crusts of pies and tarts, before putting them in oven brush with a little milk.

Mildewed spots will be effaced if rubbed with a moistened mixture of soap and chalk, and exposed to the strong rays of the sun.

To put under carpets nothing takes the place of old newspapers and it is well worth one's while to save them for this purpose, if for no other.

Eggs with very thin shells are not so likely to crack in boiling if they are put into cold water and brought very slowly to the boil.

When corks swell and are too large for a bottle, throw them for a few minutes into a basin of boiling water; they will then soften.

Old brass may be made to look like new by pouring strong ammonia on it, scrubbing with a brush and then rinsing in clear water.

A frying-pan should never be scraped. Instead, fill it with cold water, to which a little soda has been added, and let it stand for several hours.

About the Kitchen.

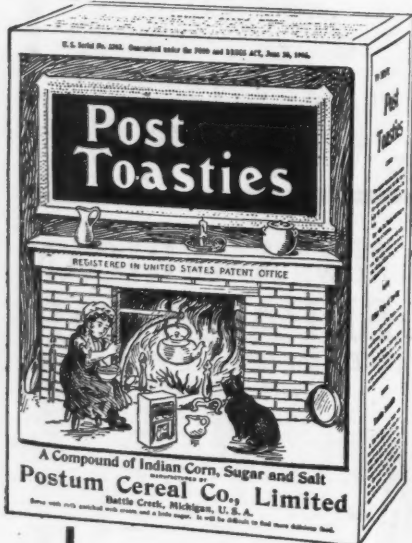
Do not salt stock till it has been thoroughly skimmed, as the salt prevents the scum from rising.

Before broiling a steak dust it with salt and pepper and rub it with salad oil. This will greatly improve it.

A floor should never be swept in a room where there is a contagious patient. It should be washed with a cloth and dipped in borax water, so that no dust annoys the patient and no assortment of germs are flung up in the air, to drift out of the window into the hall enroute to fresh victims. In burning garbage in the range it is a mistake to put it directly on the fire. Put it under the side or back lids, where the fire does not come in contact with it, and it will dry out. It is best to put the garbage in the stove at night, and by morning it is dried to a tinder and will blaze up and burn when the fire gets hotter, leaving no odor whatever. Never allow any scraps of food to be put in the scuttle.

The easiest way to blacken a stove is to use a flat paint brush about one and one-half inches wide, and a tin or jar large enough to receive the brush for the blacking. Apply the blacking to the stove as you would paint, using a newspaper to polish with. In this way the hands do not come in contact with the blacking during the whole operation and does away with unsightly cloths and brushes.

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The Fireless Cooker.

Have you heard of this wonderful aid to the kitchen? It is simply a box not in any way connected with the stove, fire or heat. You can heat your food upon the stove for a few moments until the water becomes boiling hot and then place it in this fireless cooker and close the door. The heat will be retained in the kettle and in the food for many hours. My wife places food in this fireless cooker over night and leaves it there until morning at which time she finds the food thoroughly cooked. My opinion is that this very useful implement is not known generally through the country. It is made in various sizes selling from \$3.00 to \$15.00 each according to size. It can be purchased at the department stores or at the hardware stores.—C. A. Green.

Government Cook Book.—The department of agriculture has issued a "Cook book" entitled "Economic Use of Meats in the Home." The new publication is for the purpose of telling housewives how cheap cuts of meat should be prepared. Secretary of Agriculture Wilson expects a large demand for the new publication.

A copy will be sent free to anybody who asks for it. The contents are divided under these heads: General methods of preparing meats; utilizing cheaper cuts of meat in palatable dishes; a simple but practical method of clarifying fats and methods of extending the flavor of meats.

Note: Address Department of Agriculture, Washington, D. C., for it.—Editor.

For fried squash, take the small green and yellow variety, peel and cut into half-inch slices. Dip in eggs and flour or crumbs and fry in plenty of fat until brown.

Recreation for Girls.

Mrs. Childs' plea was for the girl whose home was a cold room in a boarding house or in a tenement with the noise and grime incident to life there, exposed to the attractions which the brilliantly lighted streets had for her, of the "ladies' sitting room" which was often the only place she had to entertain a young friend. The important question she said was to devise a plan that would take the girls off the street at night, and give them wholesome entertainment and recreation. Put something into their lives that made interest and companionship, and opportunity to meet young men, the speaker said, it was the law of nature, this desire for the companionship of the opposite sex, and could not be restrained.

Editor's Note: The above is true not only of city girls but of country girls. Here is a subject often mentioned in Green's Fruit Grower as of great importance to parents. We older people are apt to forget that our boys and girls may not be satisfied with just the kind of life that we older folks are living. It is right and proper that our daughters shall enjoy the company of virtuous young men, and that our sons shall enjoy association with nice young girls. The lack of such innocent intercourse in the country is one reason why boys and girls are not more contented and happy with farm life. It is for this reason that I commend the village church which should be the social center of the locality. The church gatherings whether on Sunday or week days furnish opportunity for young people to meet one another and often lead to happy marriages.

If potatoes are greased thoroughly before being put into the oven to bake they will have a rich satiny look, and the skins will peel off as thin as tissues when they come to the table.

Useful Notes.

To remove iron rust, wet the spots with salt and lemon juice, hold the material over the steam of a teakettle, and then put out in the sun.

Individual tarts are much served nowadays with fruit or pumpkin filling and with ice cream or whipped cream on top; with them serve coffee.

Never boil a silk handkerchief, or rub soap on it. Wash in suds made of fine white soap, squeeze out, half dry in the sun and iron while damp.

When frying anything in deep fat have the flour sifter full of flour handy. If the fat catches fire, sprinkle thickly with flour and save disaster.

For lemon cake filling, beat one egg, add a cupful of sugar and the juice and rind of one lemon. Cook in an enameled tin until rather thick. When cool, spread.

Marble washstands that have become discolored may be scoured first with wet salt, and if this does not remove the stains then with salt and lemon juice.

The nicest duster for dusting out a house is a duck or goose wing, which, on account of its feathery softness, will not scratch the furniture as some dusters do.

How to Keep Juice in a Pie.—Anyone who has ever had the juice from an apple, rhubarb or other pie run all out into the oven while baking knows just how annoying it is. I have overcome the difficulty by taking a strip of clean white cloth, about an inch wide and long enough to lap when put around the edge of the pie plate, wringing it out of hot water, doubling together lengthwise, and pinning tight around the edge of the plate. When the pie is baked, take off this rim and you will find the juice in the pie instead of in the oven.—"Woman's Home Companion."

Cranberry Apple Sauce.—Cook equal parts of cranberries and apples together; when done, press through a colander, flavor with lemon juice and add sugar to make quite sweet. This is very nice served as a sweet, or if made rather tart is excellent with roast goose or pork.

It is claimed the carrot forms blood and beautifies the skin.

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paying
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not jerk reins loose. Fits tight on
any dash. Lasts as long as the
buggy. No bolts or screws required.
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priced for you to be without it. Ask your hardware or
harness dealer or write us.
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and crates. Write for
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Money Refunded
Newton's Send for Booklet,
"Horse Troubles",
Explains fully. \$1.00 per can
at dealers, or express paid.
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NEW VIRGINIA FRUIT LANDS

\$10 to \$20 Per Acre
will buy land in the beau-
tiful Shenandoah Valley that will
grow better fruit than can be grown
on \$100 to \$200 per acre elsewhere.
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environment make her very attractive to the Northern
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Dept. C6 ROANOKE, VA.

Farm and Garden



SPRING PLOWING.

Farm Reforms.

We've been investigated down to Pohlitz
on the Crick.
An' I reckon that reform will strike
us farmers purty quick;
We want the chickens taught to lay an
egg just as they should,
'Thout settin' up a cackle that'll wake
the neighborhood;
We want the pigs to break away from
customs of the past
An' learn to use a finger bowl and not to
eat so fast;
And cows should be persuaded not to
overturn the pails
When milkin' time comes 'round an' not
be switchin' of their tails.
—Washington "Star."

The Need of Better Agriculture.

By Prof. John Hamilton.

We must extend our acres downward.
How far this can be done is illustrated
by well authenticated instances of maxi-
mum crop production in the United
States. Sixty bushels of wheat have
been grown per acre; 71 bushels of
barley; 254 bushels of shelled corn; 800
bushels of potatoes; 300 bushels of
strawberries; and 12 tons of hay. While
these are exceptional harvests, yet they
illustrate the productive power of an
acre of ground, and show the possi-
bilities of agriculture in these several
directions, says "Scientific Farmer."

The following figures give the average
production of wheat, rye, oats, bar-
ley, and potatoes in Germany, the
Netherlands, Sweden, Great Britain and
Ireland for the years of 1903, 1904 and
1905, compared with the average of
these same crops of the United States
as given in the census of 1900, show
how much further advanced are their
methods than those in use in this coun-
try. The average of wheat per acre in
these eight foreign countries in these
years was 28.42 bushels as against 12.5
bushels in the United States; rye, 24.5
as against 12.4; oats, 43.56 as against
31.9; barley, 34.9 as against 26.8; po-
tatoes, 180.23 as against 93 bushels. This
shows an average increase per acre in
all of these countries above the average
production of the United States of
127 per cent. for wheat; 97 per cent.
for rye; 35.8 per cent. for oats; 30 per
cent. for barley; and 93 per cent. for
potatoes.

Such an addition to the crops of the
United States would be equivalent to
an annual increase in value of these five
crops over that reported in the census
of 1900 of \$666,483,219, or 90 per cent.
If the same percentage were applied to
the total crop production of the year
in the United States, the increase would
amount to \$2,619,124,726.

The increased average production by
foreign countries over the United States
is not because of any inherent or
naturally superior properties of the soil
or climate abroad, but it is due to the
systematic methods pursued in carrying
information respecting improved agri-
cultural operations directly to the farm-
ing people.

"Back to the Farm."

It does not require a congressional
investigation to discover the causes for
"increased cost of living," as they speak
for themselves.

The population of the United States
has increased 25 per cent. in the last
ten years, and the following is the in-
crease in the quantity of foodstuffs dur-
ing the same period: Corn, 20 per
cent.; wheat, 20 per cent.; oats, 10 per
cent.; barley, 100 per cent.; rye, 15 per
cent.; buckwheat, 10 per cent.; sheep,
40 per cent.; cattle, 2 per cent.; horses,
1 per cent.; butter, 350 per cent.;

cheese, 0 per cent.; and milk, 350 per
cent.

The production of foodstuffs has not
kept pace with the increase in popula-
tion. That is the basic cause for the
increased cost of living.

The second cause is that the earning
power of the people during the same
period has increased 25 per cent., which
means a greater demand from them for
foodstuffs and a greater number who
are willing to pay higher prices, hav-
ing the wherewith so to do.

The third cause is that all beef and
poultry are controlled absolutely by the
packers, who, finding that the quantity
does not keep pace with the increasing
population and that the people have
more money to spend, force prices up
to the utmost limit that the people are
willing to pay.

The fourth cause is cold storage. De-
stroy cold storage and the third cause
would fall with it. The packers and
cold storage exploit the appetites of
the nation for the benefit of the pack-
ers' pockets.

"Leaving the farm" for the "lure of
the city" is caused by universal educa-
tion, making the younger generation
above their business. "Back to the
farm," if it ever happens, which is
doubtful, will never happen until the
empty stomachs of the people force
them there. Possibly chemistry may
produce a substitute for natural food-
stuffs, but until "back to the farm" be-
comes a reality or chemistry produces
a substitute foodstuffs must increase in
price.—Stewart Browne, in N. Y.
"Tribune."

A New Source of Revenue from the Farm.

There are thousands of rural people
who in looking around for methods of
money making have not thought of the
question of taking summer boarders.
The production of silver mines of the
United States is \$28,000,000 per year
and that of gold mines \$99,000,000.
The income in New Hampshire and
vicinity from the summer boarder was
\$60,000,000. These figures are food for
thought.

There are hundreds of thousands of
people living in our large cities who
are compelled to leave those cities dur-
ing the months of July and August.
These people are fastidious. They re-
quire good beds, clean, cheerful rooms
and nourishing food carefully prepared.
They require some form of amusement.
There should be a lake or stream near
by. If you can supply these needs of
city people I see no reason why you
may not add largely to your revenue
by taking a few summer boarders. But
do not make the mistake of requiring
your wife to do the additional work
in the house that would be necessary
in connection with these summer
boarders. It would be better to have
less income than to lose your wife by
overwork. Plan from the start to have
additional help in the kitchen. If tak-
ing summer boarders will not warrant
more help in the house banish the sub-
ject from your mind.

One New York State Farmer.

Wm. C. Brown, president of the N. Y.
Central R. R., tells the following: "In
the year 1908 a friend of mine who
some years ago bought 5000 acres of
land in New York state raised 200 acres
of corn, which yielded 50 bushels of
shelled corn per acre; his potatoes aver-
aged 350 bushels to the acre; hay four

tons, and beets 35 tons per acre. This
was the result not of intensive farming,
but of simply intelligent farming, and
these crops were raised in the extreme
northern part of the state—twelve miles
from the Canadian line, at the northern
end of Lake Champlain.

"The same intelligent cultivation will
produce like results in every county
in the state.

"The Department of Agriculture of
the State of New York publishes a bul-
letin containing a list of farms for sale,
and the man who can read it and appre-
ciate the full significance of this list
without a feeling of humiliation is lack-
ing in that state pride and loyalty which
every citizen should possess.

"Sixty-three thousand, four hundred
and thirty-two acres of improved farms,
with fences, houses, barns, etc., at an
average price of \$17.78 per acre. Near-
ly 100,000 acres at an average of \$25
per acre."

The Dairy Farm.—Again we go to
the dairy farm and find that big profits
are being made while the farmers com-
plain that their cows do little more
than pay for their keep but are kept
principally for convenience sake. If
the cow on one farm is a paying in-
vestment it will be a dividend payer on
the next one, provided that it is handled
in an intelligent manner. The cow,
like the chickens and fruit trees, needs
a reasonable amount of care and study,
and cannot be neglected if the best re-
sults are expected.

Farm Prices and Superstition.—They
still have some connection, to judge
from the report of a sale in Onondaga
county, N. Y., of a five hundred acre
haunted farm, including saw mill out-
fit, for \$535. A few years ago the same
property sold for \$4500, and it is
claimed that the depreciation was the
result of the peculiar reputation of the
property on account of alleged uncanny
doings there. The farm was the scene
of a murder a number of years ago.

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FENCE MADE
HEAVIEST GALVANIZING**

Most of your neighbors have
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them by buying Brown Wire
Fence. Absolutely rust proof.
15 to 35c a rod. We pay freight.
160 styles, from extra close 1-inch
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strongest Horse, Cattle, Hog &
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Cheaper and far more durable than
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ALL styles for FIELD AND
LAWN. Best material and
construction. Free sample and cat-
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ANCHOR FENCE & MFG. CO.,
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Best high carbon coiled steel
wire. Easy to stretch over
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Catalogue—Fences, tools. Buy
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Extra heavily galva-
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Also Poultry and Orna-
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UP-TO-DATE MFG. CO., 959 10th St., Terre Haute, Ind.

Students Trained for Farms.

"I would make our agricultural colleges," said Mr. Brown, president of the N. Y. Central R. R., in his lecture before the students at Cornell, "and the agricultural departments of all colleges, in fact what they are in name by limiting admission to young men who want to study and school themselves in scientific agriculture for the purpose of becoming first-class farmers, thoroughly equipped for and vitally interested in that most honorable profession."

"The United States as a whole has a fertile soil and as favorable climate as any country in the world. Given the same intelligent methods of seed selection, fertilization and cultivation, our lands will produce as large crops as those of any other nation."

"What's the Matter with the United States Farmer?"

"A simple comparison of the average annual yield per acre of the principal cereals in this country with those of the older nations is the severest possible criticism of our methods, or our want of method. During the last ten years our farms have produced an average annual yield of wheat of less than 14 bushels per acre. England produces more than 32, Germany about 28, the Netherlands more than 34, and France approximately 20."

"Of oats the United States produces an average annual yield of 23.7 bushels per acre, England 42, Germany 46, and the Netherlands 53 bushels."

"Potatoes, like wheat, corn, and bread, are a food staple of the poor man. Our average yield is 85 bushels per acre, while Germany, Belgium, and Great Britain produce 250 bushels."

"Germany, with an arable area no greater than some of our large states, produces approximately 2,000,000,000 bushels of potatoes annually, while the aggregate crop of the United States averages barely 275,000,000 bushels per annum and in the year ended June 30, 1909, we imported 8,400,000 bushels."

"I have noted with regret expressions of satisfaction and self-congratulation upon the part of the press over the fact that the aggregate value of farm products has increased from \$4,417,000,000 in 1898 to \$8,760,000,000 in 1909, unmindful of the disturbing fact that this increase in value is the result almost entirely of increased acreage and a startling increase in price per bushel, and not the result of an increased yield per acre."

"This failure to increase the production of the nation's farms by increasing the number of bushels per acre is steadily and rapidly increasing the cost of living and manufacturers, merchants, and employers of labor, of every class are scanning the future with anxious eyes, for the end does not seem to be in sight. The only possible solution, the only possible salvation of the country, is an immediate and most thorough awakening of our people to an appreciation of the overwhelming importance of this condition followed by a systematic, persevering campaign of education."

"Ninety years ago the richness and fertility of the soil of New York state and the production of her farms was the wonder and admiration of European travelers. In 1860 this state was among the first of the great agricultural states of the Union. To-day the state of Maine, lying further to the north, with its rocks and its forests, raises more per acre of all the cereals than we do, and her potato crop averages 225 bushels, as against 82 bushels per acre in New York."

Depth Depends on Condition of Soil.

Wm. Rennie, a man with a long and varied experience in practical farm work, says: "The proper depth to underdrain land, will depend on the condition of the soil. For wet, tenacious clay soil it is advisable not to cut the drains too deep—say from 20 to 25 inches. In this case the lateral drains should be 20 to 25 feet apart, but it is only in cold, wet clay that it is necessary to cut drains so close as this. In ordinary dry soil the lateral drains may be from 60 to 70 feet apart and in that case the drain should be from 30 to 35 inches deep in order to get a sufficient fall for the water to reach the drains. A drain of 12 inches deep will only drain about 12 feet on each side of it, while one 30 inches deep will drain about 30 feet, provided the soil is porous."

"It is much cheaper to put drains deep and further apart, than to place them shallow and closer together, but farmers must be guided by the conditions of the soil in order to get the best results at the least cost."

When any church will inscribe over its altar, as its sole qualification for membership, the Saviour's condensed statement of both law and Gospel, that church will I join with all my heart and soul.

Farmers Don't Know the Value of Manure.

It is quite evident from a survey of the conditions in our eastern states that the farmers do not realize as fully as they should the advantages to be derived from such a method of farm practice, and the necessity for care in the handling and use of the manures made, says Prof. Voorhees, in "Country Gentleman." Aside from dairy farming, but few animals are kept; grain and hay are sold resulting in the greatest loss of fertility, and even where animals are kept but little attention is given to the care of manures. The farmers do not realize the losses that may occur in the handling of manures; they do not see the fertility that is carried away by the liquid that runs under the barn or away from the barnyard. It has been clearly shown, however, that manures thrown into the open yard and allowed to remain there, subject to the rains that fall, are liable to lose at least one-half of their content of nitrogen, one-third of their phosphoric acid and one-half of their potash, which would mean a loss from the farm of constituents alone that would cost \$14.50, in addition to the loss of about 40 per cent. of the organic matter, so essential in improving the physical and mechanical character of soils. Of the constituent nitrogen, it has been shown also that the loss sustained falls upon the soluble and thus most valuable portions, those that plants can obtain the quickest."

The nitrogen and potash which are contained in the liquid portion are in quite as good form for use as the best contained in the commercial fertilizers, which the farmer is so eager to buy to supplement the needs of his worn-out soils."

Advantages of a Silo.

The silo is now the recognized granary of the dairy farm. It is the great factor which the practical dairyman depends upon to achieve economical and profitable results. It is a thing which the first expense should not prevent any man from owning and using."

Deleterious results seldom or never follow the feeding of silage. If such a thing happens it is because of over-feeding, or the use of decayed and rotten feed, a thing not to be recommended in silage any more than in other feeds."

Silage is recognized as the factor of greatest economic value in the feeding of milch cows. Where dairy farming is a specialty it is ubiquitous. Silage is equally valuable as a feed for young cattle and has a peculiar advantage when fed to cattle being fitted for market."

A silo enables the farmer to grow more feed from his farm. By its use the feeding capacity of the farm can be doubled."

A silo enables the farmer to store a greater amount of feed in less space than he can otherwise do. It requires double the amount of space to store the same amount of dry nutrients and roughage."

A silo enables the farmer to store away his feed with less loss of valuable nutrients than it can be done in any other way. Feed cured in the open air suffers loss of about 25 per cent., while silage loses not more than 10 per cent."

A well built silo is a permanent improvement to any farm. It is besides a pretty sure indication that the owner is making good. It is a feature which should be taken into account in estimating the credit rating of any farmer, the kind of a silo which he has."

Advertising Farm Products.—You may not think advertising will pay for a man who lives on a farm. That is because you have either never advertised or failed to advertise in the right manner. If advertising did not pay the advertiser, you would not to-day be reading a paper that costs the maker many times the price it costs you. The same laws apply to advertising farm products that apply to other commodities. First, know what you want to sell and why; second, who you want to reach; third, what medium most effectually reaches the audience you desire; fourth, how you will convince your audience, says "Farm and Ranch."

These are problems every big advertiser studies, and upon his successful solutions depends his ultimate prosperity. Apply it to farm products and watch your income grow."

This Farming Paid.—A graduate of Cornell College of Agriculture, mentioned by Prof. L. H. Bailey, has secured a net income of \$250 per acre from nine acres in one year, having received back more than the entire cost of his farm and equipment in a single year's crop."

Creation lives, grows and multiplies; man is but a witness.—Victor Hugo.

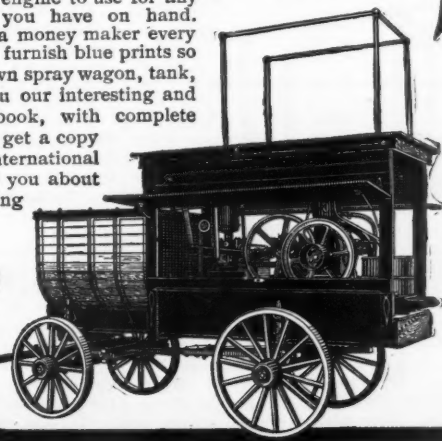
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YOU are entitled to full crops. Don't let insect pests and plant diseases eat away your profits. A Famous spraying outfit saves what you have been losing. It sprays all solutions more thoroughly, more rapidly—at less expense and with less labor than any other outfit you could buy. Thousands of farmers, fruit growers and gardeners depend on a Famous, for they know what is best. Many who have been discouraged with other outfits are having the greatest success with a Famous outfit. There is

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—no matter how little or how much spraying you will do—and you can easily detach the engine to use for any other power work you have on hand. Your IHC outfit is a money maker every day in the year. We furnish blue prints so you can build your own spray wagon, tank, etc. Let us send you our interesting and valuable spraying book, with complete spraying guide. Or get a copy from the local International dealer. Let him tell you about the Famous Spraying outfit you want.



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WITHOUT INJURY TO FOLIAGE

SPRAY WITH

"BLACK LEAF" TOBACCO EXTRACT

LISTEN TO THESE:

ROGUE RIVER (OREGON) FRUIT GROWERS' UNION: "Black Leaf" does not burn nor injure the foliage or the fruit and will eradicate the aphis immediately.

DELTA COUNTY (COLO.) FRUIT GROWERS' ASS'N: "Black Leaf" is the best remedy we have ever found for plant lice on fruit trees.

PROF. GILLETTE, of the COLORADO Exp. Station: We have found "Black Leaf" very satisfactory indeed.

HOOD RIVER (OREGON) APPLE GROWERS' UNION: We are satisfied "Black Leaf" is going to take the place of all other aphis sprays in this section.

MR. A. N. JUDD, Watsonville, Cal.: For all plant lice, and green or black aphis, "Black Leaf" Tobacco Extract is the most gratifying of all washes.

PRICE: In 5-gal. jacket cans, 85c per gal.; in 1-gal. cans, \$1; f. o. b. Louisville, Ky. The usual Western price is 90c to 95c per gal. in 5-gal. cans, owing to increased freight.

USUAL DILUTION: For Green and Woolly Aphis, and Black Peach Aphis, 1 gal. "Black Leaf" in 65 or 75 gals. water. For Thrips, 1 to 50 or 60.

TO SAVE YOU FREIGHT: Write us for name of agent nearest you.

The Kentucky Tobacco Product Co., Inc., LOUISVILLE, KENTUCKY

Green's Fruit Grower (Monthly) 3 yrs. \$1.00

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\$2.20

The regular publishers' subscription price for the above named papers for one year, would amount to \$2.20.

SEND US \$1.10

and you will receive them regularly for ONE YEAR.

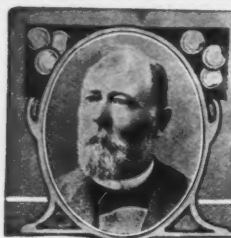
Address GREEN'S FRUIT GROWER, Rochester, N. Y.

(Write for Canadian postage if in Canada.)

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ROUND TILE

Earliest and easiest worked. Carries off surplus water; admits air to the soil. Increases the value. Acres of swampy land reclaimed and made fertile. Jackson's Round Drain Tile meets every requirement. We also make Sewer Pipe, Red and Fire Brick, Chimney Tops, Encaustic Side Walk Tile, etc. Write for what you want and prices. JOHN H. JACKSON, 90 Third Ave., Albany, N. Y.



Breezes from New Hampshire

Written for Green's Fruit Grower
by George B. Griffith.

The Jolly Sugar Season.

The granite hills of New Hampshire are just now lively, though the snow still lingers. It is the welcome sugar season, when the maples are tapped, and buckets are seen hanging from almost every tree. The limpid sap, so often sampled by juvenile lips, is oozing out from hundreds of auger holes; teams are hurrying in all directions to and from the sugar houses with hogsheads and huge butts filled with the saccharine fluid; men are emptying pails, and bright fires are burning under the kettles and evaporators. It is "boil down and sugar off," it is hurry and make most of a time that is always uncertain and depends much upon wind and weather.

The great demand for pure maple sugar and syrup, which has been constantly increasing for the last ten years, shows what an important business it is and how great it must be in the future. Maple sugar is a luxury that those who are able will have after tasting it, and the foreign demand is already large. Some of the thrifty farmers in the writer's town make over a ton of maple sweets in a good season, selling their cake products for fancy prices. Now, nice tin tubs, or wood kept scrupulously clean, with sugar houses often as nice as the farmer's kitchen, and improved evaporators, or large pans, rapidly change the sap to clear amber-colored syrup or sugar of a color ap-

average of a "sugar bush" is about six pounds a tree. The maple is the most widely distributed of our native trees, is indigenous in all the northern states, and will grow on the alkaline lands and arid plains almost as well as the cotton-wood.

Continued in June.

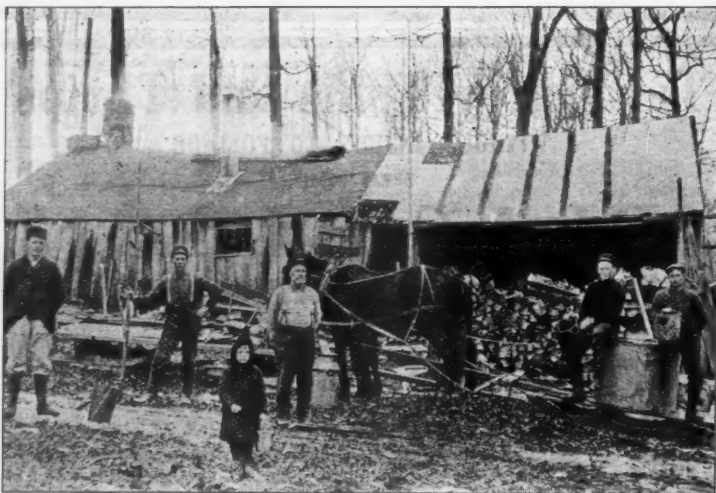
A President in a Sap-Trough.

In regions where sugar maples abound, and maple sugar is made of the sweet juice from the trees in the spring, the owners formerly used troughs (to catch the sap), hollowed out rudely with a gouge or chisel.

A story is said to be authentic to the effect that Millard Fillmore, in his infancy was rocked in a sap-trough for want of a better cradle. His old pastor, Mr. Hosmer, describing a visit to Washington during Fillmore's administration, says that he and Dr. Kendall went to one of his receptions, and, as they entered, saw the President, and his family, and cabinet, and his father at his side. As soon as they had been very cordially received, Dr. Kendall drew the clergyman aside and whispered:

"Was there ever, since the world begun, such a contrast as that group and the baby in the sap-trough?"

"It was, indeed," said his old pastor, "a great contrast. The President was a handsome man, of fine bearing, in the prime of life; and his father was venerable, tall, and not much bowed



While maple sugar making is past, the above photograph will give our readers a view of sap house time in the spring.

proaching that of the refineries, and all of a delicate flavor, far removed from the rank product of years ago.

The art of making maple sugar dates back to the days when the Indians owned and occupied this part of the country. They in some way learned something of the value of the products of the rock maple, as it stood a giant of the forest upon these hillsides, and were thus enabled in their rude and savage life to have this one luxury of life. Their mode of boiling was very simple. It was done by heating stones and throwing them into the sap, and thus doing until it suited their taste or convenience. This mode would seem to us of the present day—who are accustomed to doing things at railroad and lightning speed—slow work, and we should be willing to deny ourselves of this luxury rather than secure it by this method; but great improvements have been made since then, down through the days of our forefathers, when the trough hewn from the bass-wood tree was used to catch the sap in, and the iron kettle hung upon a pole in the open air was used to boil it in. We of the present day, who use all the modern improvements for manufacturing the maple sweet, are enabled to produce an article that is fit to set before the kings and queens of earth.

The rock, or hard maple is generally the one from which sugar and syrup are obtained by boiling the sap, but the silver or white maple can be more quickly grown, and the sap is just as plentiful, and nearly as sweet as that of the hard maple. A large tree will yield thirty-two gallons of sap during the season, from which eight pounds of sugar can be extracted. The usual

down by his eighty years. His full gray hair and intelligent face at once drew attention; and he stood there by his son, as no father then had done, as calm and self-possessed as in his justice court in some log cabin of western New York. I was to be in Washington a few weeks, and Esq. Fillmore was to return home with me; but one day I met him, and he said:

"I am going home to-morrow."

"I said, 'But why not wait for me?'"

"No, no," said he, "I will go. I don't like it here. It isn't a good place to live. It isn't a good place for Millard. I wish he was at home in Buffalo."

The story of a life career from a sap-trough to the chair of the President of the United States is not quite equal to that of the wonderful child raised from the ark of bulrushes; but it tempts us to reverse part of Samson's riddle, "Out of the sweet came forth the strong."

April Rain.

In one of these fructifying rains are endless pictures of rare delight—pictures such as no landscape painting can ever hope to equal; for the simple reason that they are now living, moving, and voiceful.

Multitudinous are the compensations of a country student—a lover of nature. Look for a minute at that forest vista behind my cozy study. Walls of purplish-green oaks build up the sides, and the light fresh green of the maples closes it in the distance. The neutral hue of the cedar lends its variety, and the brown leaves of former summers—now ministering in decay to the nourishment of successors—give it added charm.

AGENTS \$50 TO \$100 A WEEK HURRY! IT'S GREAT SENSATIONAL OPPORTUNITY FOR MAKING MONEY—MEN AND WOMEN



Every home needs—wants—must have it. Women buy eagerly. Agents excited. Orders coming thick and fast. Brand new. Field untouched. Nothing ever like it before. Never such a seller. Never such a wonderful invention. Be quick—don't wait—experience unnecessary. Just listen! One woman made \$24 first half day. W. H. Morgan, Pa. "Sold 45 Cleaners in 25 hours."

Have sold 2 out of 3 persons canvassed. "Marvelous results reported from every state. Read on about this great modern household invention. Millions have wanted—needed—for years. Only enjoyed by rich. But here at last for rich and poor. New Home Vacuum Cleaner—Blessing to all. Rushing, whirling, sucking air draws dirt, dust, germs from carpets, rugs, matings, while they remain on floor. Strange—bewildering—phenomenal. No electricity—no motors—no power. Operated in any home by a child or frail woman. Weighs 9 lbs. Different from anything ever seen. Purifies atmosphere—wards off disease—stops doctor bills. Sucks dirt from carpets, rugs, matings—from crevices, beneath radiators, furniture, behind doors, closets, etc. Sold on demonstration. Women can't resist. Shown in three minutes. Sold in five. Then on to the next. Women praising, make sales easy. Saves drudgery, cleaning, dusting. Saves taking up carpets—saves time and money. No more brooms, brushes, dust cloths. No more backache. Never such a money maker—never such a blessing to women. Never such a chance to make money easy—quick. Big profit on every sale. But you must hurry. Agencies going. Everywhere. On the jump. C. E. Goff, Mo. "Sold 5 Vacuum Cleaners last Saturday—my first attempt." Gustave Anderson, Minn. "Enclosed find order for 12 Vacuum Cleaners. Ship promptly. One man sold a dozen 3 days." F. I. Pierce, N. Y. "Wife more than pleased with Home Vacuum Cleaner. It does all and more than you claim for it." Prof. Geo. S. McDowell, Pa. "Took 8 1-2 ounces fine dirt from carpet 10 x 13 ft. L. Banville, O.: 'New Home Vacuum Cleaner best ever. Have arranged for demonstrations in stores.' And so it goes—all eager, all say, 'It's great.' So hurry. You can't fail. Get busy now. Grand invention—great seller. (Hurry! Join the money makers.) Get this money. Don't be satisfied with small wages. Don't just exist. How splendid to always have money in abundance. Break away! Send to-day. Don't write a letter—just a card. Only write—that's all. Begin now to make money. Frank Williams, Neb.: 'I have sold 15 Vacuum Cleaners in 3 weeks. Success is sure. That's the way they all read—So hurry and write. SEND NO MONEY. Just your name on a card. We'll send full instructions and offer good territory. We'll help; we'll start you making money. Write. R. ARMSTRONG MANUFACTURING CO., 851 Alas Bldg., CINCINNATI, O. Please mention Green's Fruit Grower.

READ HOW THE MONEY ROLLS IN.
Cleaners last Saturday—my first attempt." Gustave Anderson, Minn. "Enclosed find order for 12 Vacuum Cleaners. Ship promptly. One man sold a dozen 3 days." F. I. Pierce, N. Y. "Wife more than pleased with Home Vacuum Cleaner. It does all and more than you claim for it." Prof. Geo. S. McDowell, Pa. "Took 8 1-2 ounces fine dirt from carpet 10 x 13 ft. L. Banville, O.: 'New Home Vacuum Cleaner best ever. Have arranged for demonstrations in stores.' And so it goes—all eager, all say, 'It's great.' So hurry. You can't fail. Get busy now. Grand invention—great seller. (Hurry! Join the money makers.) Get this money. Don't be satisfied with small wages. Don't just exist. How splendid to always have money in abundance. Break away! Send to-day. Don't write a letter—just a card. Only write—that's all. Begin now to make money. Frank Williams, Neb.: 'I have sold 15 Vacuum Cleaners in 3 weeks. Success is sure. That's the way they all read—So hurry and write. SEND NO MONEY. Just your name on a card. We'll send full instructions and offer good territory. We'll help; we'll start you making money. Write. R. ARMSTRONG MANUFACTURING CO., 851 Alas Bldg., CINCINNATI, O. Please mention Green's Fruit Grower.

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Regular Price.	Combination	Regular Price.	Combination
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American Poultry Advocate.....\$.50		Munsey's Magazine.....1.00	
Gardener's Chronicle.....1.00		Suburban Life.....3.00	
Farm and Home......50		Ranch and Range.....1.00	
Green's Fruit Grower.....\$.50	1 65	Green's Fruit Grower.....\$.50	2 30
Farm Journal, 2 yrs......25		The Argosy.....1.00	
Farm News......25		The All-Story.....1.00	
Farmer's Call......40		Green's Fruit Grower.....\$.50	
American Stock Farm......50	1 15	Railroad Man's Magazine.....1.00	1 60
Green's Fruit Grower.....\$.50		American Stock Farm......50	
Ranch and Range.....1.00		Green's Fruit Grower.....\$.50	3 00
American Farmer......40		Suburban Life.....3.00	
Green's Fruit Grower.....\$.50	1 50	Success Magazine.....1.00	1 75
The Western Fruit-Grower.....1.00		Green's Fruit Grower.....\$.50	
The Ohio Farmer......75		Farmers' Review.....1.00	
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Wisconsin Agriculturalist......75		Green's Fruit Grower.....\$.50	
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Tribune Farmer.....1.00		Sis Hopkins.....1.00	
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Success Magazine.....1.00		Farm News......25	
Green's Fruit Grower.....\$.50	1 90	Green's Fruit Grower.....\$.50	2 60
Harper's Bazar.....1.00		Pearson's Magazine.....1.50	
Success Magazine.....1.00		Harper's Bazar.....1.00	
Green's Fruit Grower.....\$.50	1 50	Green's Fruit Grower.....\$.50	3 40
Farm and Home......50		Ainslie's Magazine.....1.80	
The Western Fruit-Grower.....1.00		Success Magazine.....1.00	
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Farmer's Voice (semi-mo.)......50		Sis Hopkins.....1.00	
Irrigation Age.....1.00		Country Gentleman.....1.50	
Farm Journal, 2 yrs......25		Western Fruit Grower.....1.00	
Green's Fruit Grower.....\$.50	3 25	Green's Fruit Grower.....\$.50	3 75
Farmer's Call......40		Review of Reviews.....1.00	
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Farm and Home......50		Harper's Bazar.....1.00	
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KIRTLAND BROS. & CO., DEPT. G. F. 90 CHAMBERS STREET, NEW YORK.

What operatic strains can rival the weird music discoursed by the sharp impact of falling rain on the shivering leaves, the shuddering of the trees, or the wild minor notes of these harps of thousand strings as they are swept by the fingers of the tempest? Life, moving life, intense and active, is there. Each drop in the iridescent veil glitters with hue of diamond, ruby, topaz, and emerald as the sunshine bursts through the dissolving cloud. Robin and thrush and oriole warble in cheerier strains to nesting mates:

"We'll stand the shower, it won't be long,

"Twill clear up by and by."

This, at all events, is the listener's interpretation of the song.

Nature is truly an inspiration in her every guise, whether in the vernal hues of spring, the gorgeous dyes of autumn, or the pure white tints of winter.

The Middle Horse.

A farmer, plowing with three horses hitched abreast, noticed that the middle horse became tired and exhausted long before either of his mates, says the Chicago "Tribune." As the animal was the equal in every way of the other two, he was puzzled as to the cause of this horse's not being able to stand the same amount of work. He finally observed, however, that as they drew the plow along, the three horses held their noses close together, and with the result that the middle horse was compelled to breathe the expired air from its fellows. The farmer then procured a long "jockey" stick, which he fastened with straps to the bits of the outside horses. The device worked perfectly; for, given his rightful share of good, fresh air, the middle horse was able to do the same amount of work, and with no greater fatigue than his fellows.

Many persons are like the middle horse; they do not get their rightful share of fresh, pure air, and this is why they are not able to perform as much work nor of as good a quality as they would otherwise be able to do.

Trying Period in Matrimony.—The most trying period in the life of married people appears to be from the five to ten years after marriage. At least that is the period during which divorces are most frequent in England and Wales. During the ten years ending with 1906 there were 9603 divorces in England and out of that number 2925 occurred among those married from five to ten years. Eighty-five occurred during the first year and 1161 after twenty years.

Cork Forests.—Cork oak is to be given a thorough trial in the National forests. The Bureau of Plant Industry of the United States Department of Agriculture has assigned two thousand one year seedlings of cork oak, now at a nursery at Chico, Cal.

Aunt Hannah's Replies

Dear Aunt Hannah: My lover has been paying me attention for several years. I objected to his going with other girls. He declined to be held in restraint and is now waiting upon other girls. This gives me great distress for I love him better than any other person upon earth. What shall I do?—Subscriber.

Aunt Hannah's reply: My opinion is that you began to dictate to this young man too soon. There are many wives who boss their husbands around, but they should not begin this bossing before marriage, as you have done. You meant well, but you have made a mistake. You do not say that you are engaged, thus you probably are not. The young man has a right to pay attention to other girls. It will require tact to win this man back. If he loves you sincerely he may be glad to come back. But on the other hand he may conclude that you are too domineering and refuse to be reconciled. A wise young man in search of a wife will watch every incident in connection with courtship in order to learn whether the young woman is the one he wants for a wife. If the young man gets the impression that the girl is dictatorial this fact will not incline him to matrimony.

Dear Aunt Hannah: I am engaged to be married to a very nice girl. I go to see her often. What can you suggest as a topic of conversation on these frequent visits?—Jacob.

Aunt Hannah's reply: Young people who are in love with each other are usually so happy in each other's society that it is hardly necessary that any conversation should be indulged in. I have known a young man to sit in one corner of the parlor while the young lady to whom he was engaged was seated in the opposite corner, with very little conversation, and yet both were happy for they both knew that each was highly esteemed by the other.

But since there should be some topic for conversation I will suggest practical subjects. Do not spend all your time talking about parties, vacations, church sociables, dances, card parties, sleigh rides, concerts and lectures past and present, or pleasant drives you have had or walks in the moonlight. Allow me to suggest that you talk about housekeeping. There is much to be said on this very interesting topic, and it is well that you should convince your intended that you have practical ideas on the subject. Try to learn what her ideas are of housekeeping and cooking, and consider between you the importance of the wife's being a good

housekeeper, for it is difficult to imagine a happy home where the wife is a poor cook or a poor housekeeper.

Talk about your prospective success in the pursuit which you have chosen for your life work. If you have decided to become a fruit grower talk about your expectations, your plans and the attractiveness of the pursuit. Tell the girl that there are years when some fruits do not flourish. A late spring frost may fall upon the strawberry blossoms or a drouth or flood may cause a partial failure. Explain to her that there are some difficulties in getting fruit pickers and tell her what your experience has been in managing the pickers. Tell her that it is possible that you may call upon your wife some day to manage the fruit pickers in order to help out in an emergency. Perhaps she will in reply explain that it may be necessary for you at times to get your own dinner or do your own washing on account of sickness or for other reasons. Talk about the rural church and of its great advantage to both young and old people. Possibly you two would not have become acquainted had it not been for the village church which you both attend. Talk of the village school and suggest how it can be improved. Talk of the peculiar traits of character of neighbors calling attention more particularly to their good qualities than their defects.

Big Profit from Cows.—That the average value of the production of the twenty-five cows of the dairy herd at the university farm during the last year was \$104.49 each, and that the average net profit of each cow was \$63.44, is shown by the new bulletin of the University of Wisconsin agricultural experiment station, giving the records of the university dairy here for 1908-1909.

The best individual records were made by Double Time, a Jersey, which produced 689 pounds of butter fat, yielding \$131.19 net profit; and by Joanna, a Holstein, that gave 411 pounds of butter fat, with a net profit of \$97.18.

"Season of mists and mellow fruitfulness!"
Close bosom-friend of the maturing sun;
Conspiring with him how to load and bless
With fruit the vines that round the thatch-eaves run;
To bend with apples the mossed cottage trees,
And fill all fruit with ripeness to the core;
To swell the gourd, and plump the hazel shells with a sweet kernel."

Breakfast Bacon.—The stereotyped bacon rasher may be improved both in flavor and appearance if it is soaked for a quarter of an hour in milk, then well flavored and fried in plenty of hot bacon dripping. This simple process transforms the ordinary rashers into a real delicacy.

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Why? Because it is not human nature to be satisfied with anything *except* the best, and common cream separators are *not* the best. If this statement seems at all strong to you, it is because you have not all the facts. Just consider for a minute these two plain, solid, common sense facts about cream separators.

The best cream separator must be determined by just two points: Does it produce the most force for the work? Is it the simplest?

The cream separator that produces the greatest skimming force is positively certain to skim fastest and cleanest. The separator that is simplest is positively certain to be easiest to operate, easiest to clean, most sanitary and most durable. Your common sense tells you this is true.

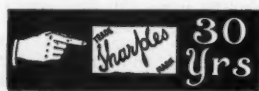
Sharples Dairy Tubular Cream Separators

produce at least twice the skimming force of common separators, and they do it without the use of disks, cones, wings or any of the other complicated, hard to clean devices that common, weaker separators must use. So Sharples Dairy Tubulars not only produce the greatest skimming force and therefore skim fastest and cleanest, but they are also far simpler than any other separator and are easiest to operate, easiest to clean, most sanitary and most durable.

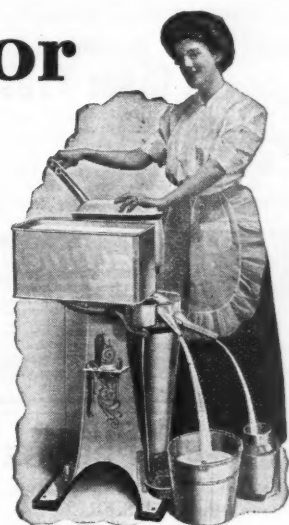
It is these facts that make Sharples Dairy Tubulars the best—The World's Best—cream separators. Tubulars are entirely different from all other separators—they are built on a different principle and are later and more modern. The difference between Tubulars and common separators is extremely easy to understand and clearly explains Tubular superiority; you will grasp it in a few minutes, agree with it heartily, and remember it forever. Our plainly written, fully illustrated catalog will quickly make it very clear to you.

If you understand this difference before you buy, you will choose but the Tubular. If you buy a common separator, you will discover the difference later and be dissatisfied until you discard the common machine and get a Tubular instead. Others have found it so—which explains why Tubular sales exceed most, if not all, others combined, and why Tubulars probably replace more common separators than any one maker of such machines sells. World's biggest separator works. Branch factories in Canada and Germany.

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If you don't like them return balance and we will refund your money.

Warning—Manila Cigars are leaping into American favor. Big demand taxes the supply; hence imitations. As the largest retail cigar dealers in the world we guarantee these genuine.

Remember a box of 50 for only \$1.65 with our guarantee of satisfaction or money back. If you prefer a Perfecto Shape we will send you a box of 25 for \$1.25. With every box we send copy of our new illustrated catalog of cigars, pipes, etc. Also OUR PROFIT SHARING LIST. Without delay, address the

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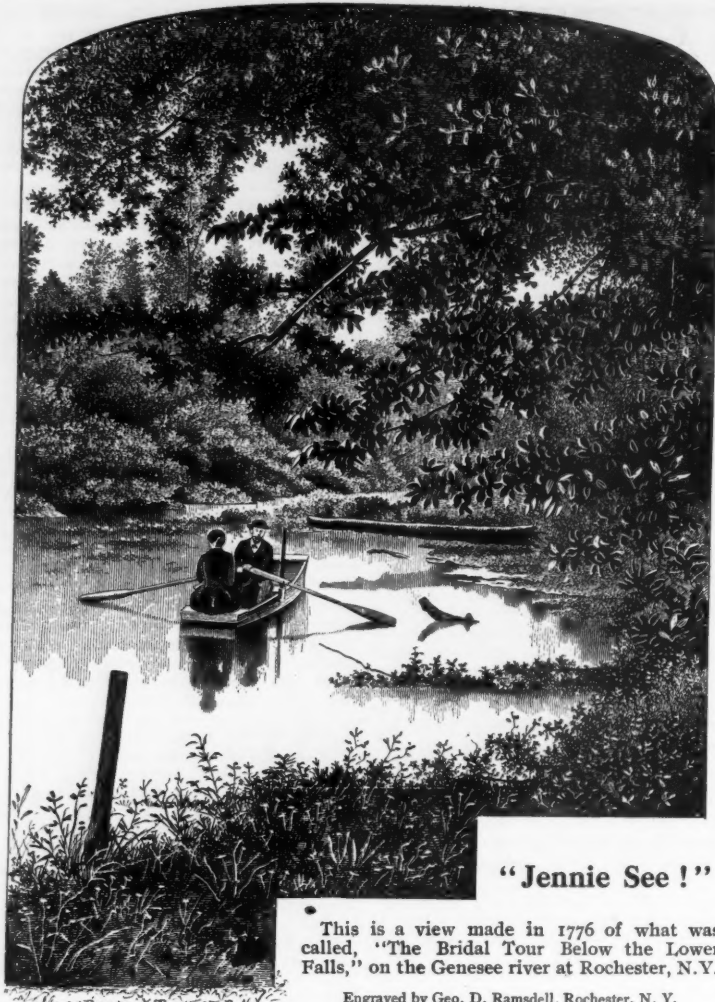
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Standard Post-Hole AUGER

—does better and faster work than any similar device, and you cannot afford to be without one if you set posts—plant trees—dig wells—build fences or bore in the earth for any purpose. Get Catalog 7

STANDARD EARTH AUGER CO.
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"Jennie See!"

This is a view made in 1776 of what was called, "The Bridal Tour Below the Lower Falls," on the Genesee river at Rochester, N. Y.

Engraved by Geo. D. Ramsdell, Rochester, N. Y.

Soil of Western New York.

By John R. Bowie, U. S. Bureau of Soils.

Continued from Last Issue.

The soils of the Dunkirk series occupy the rolling upland in the central and northern portion of the county. They constitute an extension of a considerable development of glacial and glacial lake soils through the Ontario plain portion of western New York. Ten different soil types of this series, varying in texture from light gravelly loams to stiff clay, were encountered and mapped in the course of the soil survey. The heavier soils of the series constitute the best general farming soils in central and western New York.

The Dunkirk clay, although very dense and difficult to manage, is well suited to the production of wheat and grass and when properly prepared is also capable of producing good crops of alfalfa. It is largely used for permanent pasture and on account of the excellent pasturage afforded, a considerable portion of the type is devoted to finishing of meat cattle.

The Dunkirk loam is an extremely important soil type in the county, adapted to the production of wheat, hay, beans, alfalfa and corn, and it is also one of the best soil types in the county for the production of apples and other fruit crops. It is capable of sustaining the widest range of farm industry of any soil in the county.

The Dunkirk fine sandy loam, is also extensively developed and has become one of the most intensively farmed soils in this portion of western New York. It is largely occupied by dairy farms, which supply milk to the Rochester market. It produces both red clover and alfalfa to advantage and large yields of corn both for ensilage and for grain are always secured on this type. It is a good early potato soil and fairly well suited to the production of late truck crops. These are the most important soils of the Dunkirk series found in the county.

The muck areas of Livingston county, although of comparatively small extent, are extremely important, since they are largely utilized for the production of celery, lettuce, and onions, all of which crops are especially well suited to this class of soil. A modification of the muck beds, underlain by marl deposits, is not farmed, but is being developed for its extensive supply of finely divided carbonate of lime. This material is much needed in the conduct of farm affairs and for sweetening the soils of many of the upland soil types.

One of the most important features of farm improvement in Livingston county consists of more thorough drainage of the agricultural lands and the reclamation of the numerous small swampy areas. This matter has been

treated in the bulletin by Prof. Fiffpin and is worthy of the careful consideration of the farmers of Livingston county. A considerable use of tile drainage for farm land improvement has already been made in Livingston county by the most progressive farmers and the results in all cases where the drainage was thoroughly accomplished have amply justified the expenditures for tile.

The range of land values in Livingston county represents almost the extremes of New York state. Farms consisting chiefly of the Volusia silt loam in the elevated southern portion of the county can be bought at \$8 to \$10 an acre, with no active movement even at these prices while the more intensively farmed central and northern portion of the county, especially where orcharding has become well established, furnish instances of farm lands which would not be offered for sale even at a valuation of \$350 an acre. There is thus an excellent opportunity within the county for the development of its soil resources and for an appreciable increase in the value not only of the farm lands, but also of the farm equipment with the development of more intensive forms of agriculture. The market and transportation facilities of Livingston county are exceptional, since practically all of its farm products can find outlet at the markets of Rochester and Buffalo, and railroad connections make possible shipments to the great markets along the Atlantic seaboard and in the central states.

Trapping in the Wilds.

"Maine trappers usually works in pairs an' have two camps or cabins, an' it's no uncommon thing to have 'em fifteen miles apart. It begins to snow along about 10 o'clock. There is more snow up there on the mountains than there is in the valley. The goin' is hard. The traps need a good deal o' resettin' and fixin' up, fer the bobcats will always be busy along the line.

"Then ag'in a fisher fast to a trap has managed to drag it off a good way in the woods 'fore it clogs on some thin', an' o' course the trapper has got to foller it. That takes a lot o' time an' the day keeps goin'. The wind drives the damp snow ag'in the trunks o' the trees as it falls an' it sticks there like glue, so that in a couple of hours or so the trapper can't make out the blaze marks on the trees, not till he stops every little ways to brush the snow off, an' that takes more of the day away from him.

"An' if darkness comes too soon the trapper of course loses the line entirely. He don't know whether it goes to the right or the left or straight ahead. He knows one thing, though, an' that is that the camp is a good ways off yet some's or other, an' he begins to think he stands a snug sort of chance

o' havin' to spend the night on the mountain. He slips his hand in his pocket to see that his match box is there all right, an' stout hearted man that he is, he turns a trifle faint when he fails to find it. Slid out of his pocket, like as not, while he was sleepin' in his bunk the night before.

"Now the trapper begins to feel that his situation ain't one o' the kind to make him feel joyful. His thick clothes are wet through. By and by it quits snowin'. The wind has shifted 'round in the northwest an' is comin' out of it a bitin' gale. The snow comes tumblin' down from the trees an' it hurts like pizen as it hits him, for it's froze hard as bullets. The trapper don't need no th'mom'ter to tell him that the weather has knocked it 'way down below zero, an' he knows that he never kin stay fer long on that mountain an' live, so he keeps a-goin'. He don't know where he's goin' to, but he keeps a-goin'. He's got to.

"As he struggles on through the snow, knowin' as well as he knows anything that the chances is all dead ag'in him, he fires his rifle now an' then; then by an' by he hears a rifle shot that ain't his'n. No one who's ever been lost in the depths o' the wintry woods knows the language the crack of a rifle or the bang of a shotgun speaks to him as he plunges along in the ghostly white darkness—if you kin imagine that there kin be setch a darkness. He rushes this way an' that, now doubtin' that he heard it an' strainin' his ears to hear whether it'll come ag'in an' scatter them doubts. An' that waitin' seems an age, an an age o' torture at that. Then he hears it ag'in. There ain't no longer any doubt about it. And the trapper knows the sound of it now. It is his pardner's rifle. So the trapper answers the signal an' plunges on in the direction of his pardner's shot.

"By and by he comes in sight o' the camp. Bright sparks are shootin' up in showers out o' the smoke hole. It ain't nothin' but a rough, mebbe unchinked pile o' logs, you might say, but no palace with kings in it an' gleamin' with a million 'lectric lights could bring setch joy. The finest dinner that was ever spread couldn't never taste noways like half as good as the meal o' flapjacks, venison an' black coffee out of a tin cup that his partner has all ready for him when he tumbles into the cabin, knocks the snow off himself an' pitches into the feast. An' no downy couch ever brung setch rest to mortal man as that bed o' spruce boughs on the cabin floor will pooty soon bring to him.

"There ain't a trapper in the woods o' Maine but what kin tell you of more than one day's experience setch as that goin' over his line o' traps. An' there'd be more o' 'em yet that could tell you of setch days that had come to them if they'd been within sound o' their pardner's rifle. 'Cause then they'd be livin' now to tell about it."

Arbor Day in Ireland.

Ireland is trying to re-establish its claim to be known as the "Island of Woods." It is interesting to know that an American importation "Arbor Day," is being made use of largely in furthering the ends of forestry.

Since Arbor Day started in Nebraska, thirty-five years ago, its observance has spread all over the United States. The tangible result in this country has been the planting of over six hundred million of trees for the most part by individual school children, besides the interest aroused in animate, and inanimate nature and in forestry. In Ireland a similar movement is now fairly launched and is rapidly spreading throughout the country. The time set for planting trees is in the fall, instead of the spring, as in most American states, viz.: the week commencing October 29th of each year.

Last year a circular letter was issued by the Irish Forestry Society to all bishops, clergy, and public bodies urging them to organize an Arbor Day in the various districts. A hearty response was received, and the support came from all sections of the community, from peers, peasants, clergy, and artisans, not omitting the school children.

Swearing Unnecessary.

"Well, somehow or other, I never learned to swear," he replied. "When a boy I seemed to have an aversion to it, and when I became a man I saw the folly of it. I have always noticed, too, that swearing helps arouse a man's anger, and when a man flies into a passion, his adversary, if he keeps cool, always gets the better of him. In fact, I never could see the use of swearing. I think it is the case with many people who swear excessively that it is a mere habit, and that they do not mean to be profane; but, to say the least, it is a great waste of time."



Letters From the People.

"Prudent questioning is the half of knowledge."—Proverb.

Editor Green's Fruit Grower: I have very much enjoyed the reading of the Fruit Grower. It is the best of the fruit papers, and fully up in agriculture, as far as it takes it.—S. A. H., Pa.

From a Michigan Fruit Grower: I find a great saving of money in buying trees, plants and vines direct from Green's Nursery Co. I have dealt with them for the past ten years and find all trees, etc., that came from their nursery true to name. I have now orchards, all of which came from Green's Nursery Co., Rochester, N. Y., in which I take great pride.—John A. Evitts.

Mr. A. W. Helmer, of Connecticut, asks what value the currycomb has for the working horse and if I know of any vacuum cleaner for horses, and what kind of a floor is best for a horse stable.

C. A. Green's reply: The currycomb is valuable for keeping the horse clean. Any animal is healthier and happier for being clean. I know of no vacuum cleaner especially for horses, but any vacuum cleaner can be used on a horse. The best floor for any stable is a cement floor. Such a floor is in the end cheaper than any wooden floor.

Dear Sirs: We have several years tried to grow rhubarb, but every summer it dies (simply rots, root and all). We would thank you to give us some directions and information regarding cultivation. We think it is probably the hot weather that causes it to die. If so should it be shaded? You can answer this in Green's Fruit Grower if you care to for we receive it regularly.—W. C. Grunut, N. C.

C. A. Green's reply: Plant early in spring or fall. Plant on north side of fence or building.—C. A. G.

The German Prune at Rochester, N. Y.

A subscriber of Green's Fruit Grower writes that a neighbor of his on the lake shore sixty miles west of Rochester, N. Y., has an orchard consisting of one half acre of German prune from which he sells \$500 worth of prunes each year. Mr. Hooker on the eastern border of Rochester has a much larger orchard of German prune. As I pass by that orchard I see the trees heavily laden with prunes almost every season and I learn that he markets them at a fancy price. Though German prune is a valuable variety I prefer York State prune which is nearly double the size of German prune, and equal in quality and productiveness to German prune.

Bran Mash for Horses.—Bran is a favorite feed for horses. Bran is highly esteemed by all lovers of the horse. The fact that bran was not fully appreciated as food for animals is illustrated by the fact that it has been constantly increasing in price in the last twenty years. There was a time when millers almost gave the bran away, but now it is an important part of the profit of those who grind wheat into flour. Horses should have from eight to twelve quarts of bran mash regularly once a week. It keeps bowels loose and regular. Saturday evening is the best time to feed this bran mash. Readers of Green's Fruit Grower are advised not to forget the weekly bran mash for horses.—C. A. Green.

Mr. Charles A. Green, Dear sir: In behalf of the city, and particularly in behalf of the public schools and social centers, I wish to express our hearty thanks for your co-operation in making a success of the first municipal art exhibit. We are greatly indebted for the beautiful pictures loaned by you which contribute so much to the artistic quality of the exhibit. We believe that the opening of this first municipal art exhibit is a notable and significant event in the life of our city, and your generosity illustrates in a striking way that growing willingness to share to the utmost possible extent with our fellow citizens the treasures of art which we possess. Again thanking you, I am, Geo. M. Forbes, President Rochester, N. Y. Board of Education.

Buying Western Farms.—A subscriber of Green's Fruit Grower asks whether a northern man would do well to buy fruit land in certain sections of the west at \$15 to \$25 per acre, with good location and market.



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This Split Hickory Special is my leader this year. It's stunning in style and finish; has 125 special features; outclasses every other buggy in every way. At least \$26.50 lower than any value like it at any dealer's. Write me the postal now. H. C. Phelps, President.

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C. A. Green's reply: A man might do well and he might do very poorly in buying land at the place named or elsewhere. No man should buy land without first seeing it and give it careful inspection making diligent inquiries of disinterested men in the locality where the land is offered for sale. No one should take the statements of real estate agents as to the value of land or as to its adaptability for fruit growing. My opinion is that in many parts of the western states land is higher in price, in proportion to its value for fruit growing or farming than farms in western New York.

Green's Fruit Grower: Although far distant, your paper was quoted at the recent three days' convention of fruit growers at the Commercial club rooms in North Yakima, Wash., and spoken of highly; in fact quoted as an authority of great value. I was much pleased as I am personally acquainted with your Mr. C. A. Green, and think highly of him, having been associated with him in church work, and count him among my friends. We are about planting an orchard of over 300 acres extent in this wonderful valley, using the Wine-saps, Spitzenbergs and Newtown Pippins only. Our tract is 480 acres in all and is located on a southeastern slope with an elevation of from 1300 to 1700 feet, with perfect air drainage, fine volcanic ash soil and good water supply. Mr. Sylvester is our superintendent and an earnest and enthusiastic fruit grower; we shall read Green's Fruit Grower with great interest. I am sure will find much therein that is helpful in our work. Accept my best wishes.—C. E. Manning, Wash.

My Experience.

Editor Green's Fruit Grower: I have been a constant subscriber to the Fruit Grower for many years, and now feel that I cannot do without it. It is practical and more than abreast with the times. A leader in its class, the social and moral features are of high class, such as induce right thought and right conduct. The editor's "walks and talks with readers" are highly appreciated, also letters from the people and all other features.

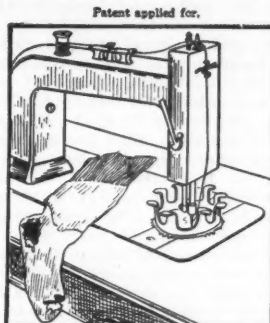
My home is at Prospect, in the wonderful fruit producing section and big timber area of southern Oregon.

From early youth until past the age of thirty-four years—at which time I quit both—I used cigars, chewing and smoking tobacco freely. During the eighteen years since quitting it I have kept a strict tobacco account, crediting it with two dollars for chewing and four dollars and twenty-five cents for cigars and smoking tobacco quarterly (which is considerable less than amount I was in habit of using), during this time the next earnings from investment of tobacco account funds have amounted to \$612.00, hence the account today shows a net credit balance of \$1012.00, and in addition to all this, the great health benefit, realized from abstaining.

When starting this tobacco account fund it was my intention to carry it twenty years, then present it to my wife, but misfortune has deprived me of that pleasure, so now I intend to close the account and invest the amount in a few acres of good land, thence apply the income derived from the land to improving the same, and in the end leave it to my children, an example of benefits which may be derived from good habits.—S. S. Aiken.

Wisconsin a Fruit State.

Mr. Chas. A. Green, Edr.: In looking over your issue for March I notice on page 8 this heading, "Will be 500 acres of cherries in Door County at end of year," and then you go on to state that



DARNS A HOLE IN A MINUTE

AT LAST

We are able to offer our readers a practical darning—the most useful device ever discovered for darning stockings, towels, underwear, dress goods and cloths of every description. By the use of this clever little invention you can darn twenty holes with ease while darning one in the old way by hand, and the work is so smooth it will not hurt the most tender feet.

A DARNER THAT DARNS

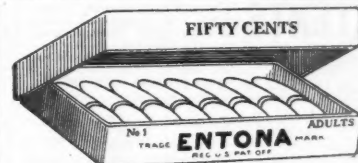
It fits any sewing machine; mends any size hole in all kinds of stockings, and uses cotton, wool or silk with equally good results. With this attachment you can mend any part of the stocking, or other fabric, and at the same time reinforce with other material, too, if desired.

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for just a little of your spare time. Ask two of your neighbors, who do not now take GREEN'S FRUIT GROWER, to subscribe for one year (12 issues) at 25 cents each. Send us the 50 cents collected, with the names and addresses of the TWO subscribers, and as pay for your trouble we'll send you this Wonderful Darning Device, postpaid.

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AGENTS—\$33.30 A WEEK

Why not make it Jack Wood did it! He writes: "Hurry up 100 more—sold first lot in 2 days—best seller I ever saw." Hundreds of agents earning money—\$5.00 worth of tools for the price of one. Wonderful invention—drop forged from finest steel. Nickel Plated all over. Astonishing low price to agents—1.200 ordered by one man. Get our grand confidential proposition quick. Sample free—don't delay—experience not needed—write at once. THOMAS MFG. CO., 2170 Wayne St., DAYTON, OHIO. Please mention Green's Fruit Grower.

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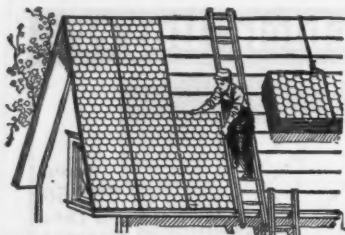
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IS IDEAL FOR ROUGH AND READY WEAR IN THE WETTEST WEATHER. IT WILL KEEP YOU DRY AND COMFORTABLE AND GIVE LONG SERVICE.

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mulch is around the tree? I can not dig it in, as I usually do. I want to use fertilizer, no matter what system I follow. Would broadcasting the fertilizer on the mulch around the tree do, without digging it in? What is your opinion on basic slag for peach trees, to take the place of phosphoric acid? I know it contains considerable lime to sweeten the soil, but I want to know if it is the best phosphoric acid to use for peach trees, in connection with nitrate of soda, and potash mixed together, or is ground bone better, and how about guano to take the place of basic slag, for its phosphoric acid?

What can I do to protect my trees from mice that gnaw the bark of peach trees about two and three inches under the ground, right around the crown and roots? Last winter I have mulched my trees with barnyard manure from four to five feet in diameter, all around the tree, the following spring I have dug the manure in, which keeps the ground loose and mellow all summer, and the moles and mice tunnel all summer, all around the tree, which I think is the cause that the ground being so loose the mice gnaw the bark under the ground. Is there any remedy?

I am at a loss, and do not know what to do, and do not know what system to follow, therefore, I ask you for aid or any help you can give me, by so doing you will greatly oblige me. Awaiting your valuable reply, I am—Nicholas Retallate, New Jersey.

C. A. Green's reply: In reply, I will say that I have had no experience with sod culture or sod mulch on such rocky soil as you mention, therefore I do not see how I can give you advice.

You should expose the large roots near the base of the tree in June and October and dig out the white grubs. I would apply the fertilizers to the soil only as far as the branches of the trees extend. Basic slag is a good fer-

tilizer. Nitrate of soda will increase the growth of the trees. Potash in any form is a good fertilizer.

I cannot advise about mice that gnaw the roots of trees. Wire netting can be bought at almost any hardware store.

The main question which you ask of us is one which seems to require the reply of an expert or professional, therefore please address your inquiry to the U. S. Department of Agriculture at Washington, D. C., or to your state Experimental Station.

Many questions asked by our readers may be found answered in our magazine as it appears month by month. When possible we call the writer's attention to some particular article that answers the question, but this cannot be done in every case.

Baby Found a Home Through Green's Fruit Grower.

Mr. Editor, Dear Sir: Some time ago I wrote you asking that you insert an ad in your paper, in reference to finding a home for a little boy, who was with me, at the Crittenton Home, Norfolk, Va. At that time I was in charge of the home and became very much interested in this child. As I soon discovered he is an unusual child, was not born in the home, but was left there by his parents, who quarreled when he was only a few days old. The parents belong to the F. F. V., of Va., were legally married. So I had no hesitancy in recommending him into a first class home. I preferred a country home for him. City homes were offered. And that is why your paper came into my mind. I write this to thank you for your kindness in the matter. He is in a home in Ohio. One of the best homes in the United States, where he is loved and cared for by a Christian family living on a farm near Cleveland. He will be raised and educated by these educated Christian people, and will never know but what he was born there in that lovely farm house. The home was found by your ad. You can feel that you did a good deed in allowing the "space in your paper so cheerfully. You know, "Inasmuch as ye have done it unto one of these little ones, ye have done it unto me." You will get your reward. Yours respectfully.—S. M. C., Md.

Spraying with Arsenate of Lead.

Arsenate of lead troubles much less from settling than paris green, and does not burn the tender foliage when used as strong as five pounds to fifty gallons of water, although three pounds is as much as is commonly needed. At this strength it will furnish as much arsenic as when a pound of paris green is used in from fifty to sixty-five gallons of water. Arsenate of lead also owes much of its value to its superior adhesive properties, which under ordinary circumstances, fully doubles its effectiveness.—L. R. Taft, Agricultural College, Mich.

Cultivating Old Orchards.

If an apple orchard standing in sod ten years or more were given thorough cultivation and fertilized, what would be the result?

In commenting on the above question at the Western New York Horticultural Society meeting, Professor John Craig said the fertilizers might make the orchard grow too much. Usually, however, we do not make a serious mistake in breaking up an orchard which has been in sod ten years.

To Robin Redbreast.

Little bird with bosom red,
Welcome to my humble shed;
Daily near my table steal,
While I eat my frugal meal;
Fear not, little though there be,
I will share a crumb with thee
And be well pleased, if I could say
The pleasure in thy glancing eye.
Come my little friend, again
Enter through the broken pane;
Ask of me thy dally store,
You're ever welcome to my door.
—Buffalo "Inquirer."

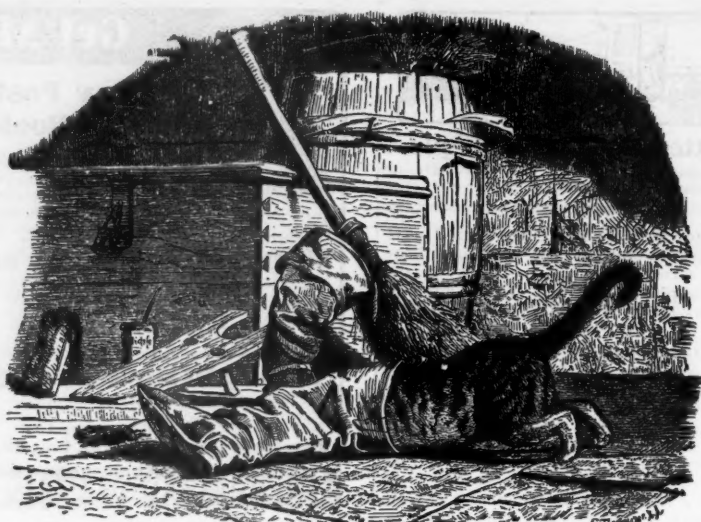
"I cannot understand ze language," the foreign nobleman complained.

"What's the matter, count?"

"First you say ze young man is a raw youth."

"Yes."

"Zen you say he is half baked."—Louisville "Courier-Journal."



The above is an old print illustrating the activities of the cat in pursuit of a mouse. We think the mouse has the better of it.—Wood cut by kindness of Geo. D. Ramsdell, Rochester, N. Y.



A human brain cell, as described by Dr. Van Gleson, is a single bit of nerve substance, from one end of which spring a number of tentacles, while from another part arises an arm different from these and of great length. The long arm is for transmitting impressions from one part of the brain system to another. For example, a given "octopus" extends its long arm so as to touch the tentacles or short arms of a second octopus; the latter in its turn effects contact with a third, and so on. Thus a message is conveyed, and the mind gets its news.

Vaccination.—The suggestion for the great discovery came from an humble milkmaid. In the presence of Jenner she declared that she could not take smallpox because she had suffered from cowpox. Truly out of the mouth of ignorance proceeded great wisdom. Once planted in the mind of Jenner, the idea grew until it developed into the most widespread practice of preventive medicine the world has known. With the advent of vaccination for typhoid, we are led to hope that other diseases may yet be forefended against in the same way, and that with sanitation guarding the gates of health, man's complete declaration of independence against contagion may be written before the second century of Jenner's discovery has passed.

Professor Crittenden, of Yale university, says the prices are high because Americans eat too much. "A royal meal at any time," he says, "is a simple cereal along with a couple of vegetables and a bit of fruit." His recommendation for a "fine meal" is a "cereal bowl three-quarters filled with crushed uncooked wheat, mixed at the time of eating with two tablespoonfuls of coarsely-chopped pecan nuts, one tablespoonful of currants and a chopped fig." That would be a "royal meal" indeed, for the hard-working farmer, for the healthy, growing country boy, full of life, energy and appetite, and the hardy woodsman. Sometime, perhaps, we may have a race of college professors whose vision and knowledge of life will extend beyond their own households and classrooms.

The Importance of Sleep.

"Sleep is a fine medicine," writes William Hemmingway in the issue of "Harper's Weekly" for March 12th. "No man can be great or successful or even tolerably decent unless he sleeps enough and with regularity." The author discusses the possibility of obtaining eight or nine hours' sleep amid the noises of the city. "It is not so long since the eight-oared crew of Columbia University won the intercollegiate championship of all America at Poughkeepsie on the Hudson, and several times since then the crews of this university have finished second in the great struggle," he writes. "Does the strain, the noise, the bustle, the crowd excitement of the metropolis afflict these young athletes with insomnia or neurasthenia? What a joke! City-born, city-bred, city-workers, they are splendid types of the clean, normal, well-balanced athlete."

Have you bought a book of secrets and are you "making \$12,000 a year on a small farm raising fowls?"

Swat That Fly!

"Beware of the dangerous housefly! Wherever he goes death and disease may follow. War to the death should be declared upon the little pest. His presence is a disgrace. His touch may be deadly. Either man must kill the fly or the fly will kill the man. If there is no dirt and filth there will be no flies. There will be fewer dead babies if there are no flies."

"Flies kill a greater number of human beings than all the beasts of prey, with all of the poisonous serpents added. They spread disease which slays thousands, while big, powerful beasts kill single victims."

"Watch the fly as he stands on the lump of sugar industriously wiping his feet. He is wiping off the disease germs; rubbing them on the sugar that you are going to eat, leaving the poison for you to swallow."

"There is special danger when flies drop into such fluid as milk. This forms an ideal culture material for the bacillus. A few germs washed from the body of one fly may develop into millions within a few hours, and the person who drinks such milk will receive large doses of bacilli, which may later cause serious sickness."

The following directions are given for killing flies:

"To clear rooms of flies carbolic acid may be used as follows: Heat a shovel or any similar article and drop thereon twenty drops of carbolic acid. The vapor kills the flies."

"A cheap and perfectly reliable fly poison, one which is not dangerous to human life, is bichromate of potash in solution. Dissolve one dram, which can be bought at any drug store, in two ounces of water, and add a little sugar. Put some of this solution in shallow dishes and distribute them about the house."

"Sticky fly paper, traps and liquid poisons are among the things to use in killing flies, but the latest, cheapest and best is a solution of formalin or formaldehyde in water. A spoonful of this liquid put into a quarter of a pint of water and exposed in the room will be enough to kill all the flies."

"To quickly clear the room where there are many flies burn pyrethrum powder. This stupefies the flies and they may be swept up and burned."

Keep the garbage pails covered.

We seem to carry the idea that unhealth is a necessary part of the order of the world, says Dr. L. H. Bailey in his recent address. All organs tend to go wrong and must be regulated; and we, therefore, have numberless liver regulators, stomach regulators, nerve regulators, and the like. There are still many persons who look on sickness as a judgment or a punishment rather than to regard it from the rational and scientific point of view. This notion is an expression of the idea that the world is, at best, a poor place to live in, that we are all inoculated with original sin, and that we are all doing penance. Now the plain fact of the matter is that it is natural to be healthy. It is natural for a fruit tree to bear; we should be careful not to put any obstacles in the way to prevent its bearing. It is an imperative duty that we remove the obstacles to good health. This is much more important than, merely to treat disease. We have developed colleges of medicine or of disease. We shall sometime have colleges of health.

Our traditional idea of God as a ruler who sits on a distant throne and rules the universe is another expression of our unsympathy with nature, because we put God above and beyond nature. The modern outlook is rather more to find God in nature.



The above picture is a photograph of an apple tree known as Rome Beauty. This shows a seven year root and a two year old graft at top. Seven bushels of apples were picked from this tree last fall.

Old Man Samuels.

Written for Green's Fruit Grower by Mary B. Grix.

So you do not like "old man Samuels' youthful air," and cannot imagine his enthusiasm "over his old vegetables and things?" Let me tell you a story.

To you Mr. Samuels is only a tall, bony, old man with large hands and long fingers, and such a pronounced Adam's apple that you make grimaces at him. To me—well, I must begin with his boyhood.

As a boy he was the most truthful, honest, kind-hearted, sweet-tempered, unselfish, well-mannered chap going. What his disposition is now, my story will tell.

That Samuels boy loved gardening with all his heart. But he never had a chance to do any! All the land he had to play on was the walk in front of the house wherein he lived. His grandfather had a garden, but he was one of those grandfathers who was never young, and he never wanted any childish help.

The boy couldn't have a real garden so he drew a farm on paper! Such a well planned farm it was. It was one hundred and sixty acres, all drawn to a scale. The farm was marked off into fields and pastures—each grain and vegetable had its allotted ground. There were the barns and stables, the chicken-coops and pig pens. And—I came near forgetting it—a small orchard. That boy didn't intend to live on the farm alone,—he would find the next best woman to mother and marry her.

After the general plan of the farm was completed he drew separate plans of the house and of the farm buildings. Part of the barn was arranged for living apartments, for he did not intend to build the house until he had a wife to put into it.

He also drew up lists of stock and fowls with the approximate price opposite. There were lists of seeds; and of utensils, both for farm and household use. There were lists of the requisite seeds to be used in a small garden in front of the home.

He read much about farming, and he learned all he could from father's and mother's friends, several of whom were farmers and gardeners. As a result he was able to compute the amount necessary to plant an acre (not only of one kind of seed but of each of the varieties he wished to plant) and what, after due preparation of the ground, correct planting, and careful cultivation, he might expect to reap.

Friends laughed, relatives ridiculed; but father and mother took an interest in the boy's paper farm. Grandfather suggested that he might better be learning something practicable. Learning something practicable! Did increased accuracy in writing, spelling, pronunciation, measuring, and drawing count for nothing? And what about the neatness with which it was all done?

Years passed—the boy's love of gardening increased. Yet the chance for him to develop this inclination seemed to decrease. His time was more and more taken up with his studies. Grandfather grew older and less inclined to be bothered with boys. The garden space grew smaller, owing to the family having moved to a place nearer town. Father and mother became more engrossed with cares for the years had brought them other children. At last mother's health gave out. Death claimed her, and father's spare time was necessarily given to the younger children.

Young Samuels grew to be a man, but his dream was no nearer its fulfillment. He secured a good position and in time married. His wife's ideas, before marriage, were in strict accord with his. How enthusiastic she became at the mere mention of gardening!

Shortly after his marriage he moved to a place which afforded a small space for a garden. Yet it was above the canal and consequently he could not irrigate it. However, he planted his garden and kept it alive by carrying water to it. His wife was infuriated at the mere idea of his wasting (?) so much time on a garden!

About this time his father offered them, as a gift, a piece of land in the suburbs. It contained three or four acres, was good soil, and had excellent water rights. He offered, also to loan them the money to build a home. Samuels went home jubilant—a part of his dream was to be realized at last! Mrs. Samuels scolded, cursed gardening and all pertaining to it. "Live outside the city, never!" The husband, who was a peaceable man, was forced to give in, and refuse his father's offer.

Once more Samuels moved. This time he had an excellent garden for he could get water to it, but his wife hated it. He never reproached her but strove patiently, day after day, to win her over, not only for his sake but—as the children came—for the sake of the little ones. But it was in vain. They moved again to a small place above the canal.

Years passed. He learned not to speak of a farm, or farm life, in his wife's presence—in other words Samuels learned to keep his thoughts, hopes, and ambitions to himself. But there was a yearning look in his eyes, and a suppressed eagerness in his countenance whenever he heard or saw anything pertaining to farm life.

At length the children married and the youngest daughter married a farmer. The mother could not be separated from her "baby," so Farmer Jones persuaded her and her husband to make their home with him.

Samuels has gained at last his heart's desire, not in the way he planned as a boy but—have you ever known the joy of working in a garden? Can you wonder at the old man's enthusiasm? At his youthfulness?

World Market Requirements.

Professor Samuel Fraser, superintendent of the Fall Brook farms, discussed the "Requirements of Certain Markets, and the Best Varieties of Fruit for Those Particular Markets" at the annual meeting of the Western New York Horticultural Society.

In prefacing his address Professor Fraser said that to secure data in regard to the markets, a circular letter was sent out to 316 commission men whose names are listed under the membership list of the National League of Commission Merchants of the United States; 111 replies were received from twenty-six markets. The same questions were asked of salesmen in Great Britain, France, Germany and Holland,

150 inquiries being sent out and 86 replies secured.

The answers received indicate that the plan of sticking altogether to one market is not a wise one. Certain varieties almost always sell better in one market than in any other, particularly at certain seasons.

One market prefers larger apples than another. For instance, London is the market for small Newtons (boxes), and Glasgow is the market for large Macintosh Reds (barrels). Liverpool prefers pears in half boxes to any other packages. Baltimore will take Tolman Sweets at good prices when they can scarcely be given away in Boston.

To All Readers of Green's Fruit Grower.

The editor of Green's Fruit Grower is anxious to secure old copies of Green's Fruit Grower published in 1893. Any reader who happens to have any such copies will please notify us or mail them to us and we will see to it that they are properly reimbursed.—C. A. Green, Editor.

Bagging Grapes.

Editor of Green's Fruit Grower: I use a paper bag four and one-fourth by nine and three-fourths inches as they lie folded in the package. I insert my hand and open out the bag. Tear two slits one and one-half inches deep from the top edge opposite each other. Slip the bag over the cluster of grapes, letting the slits straddle the stem the cluster grows from. Then I gather the paper around the stem of the leaf that grows out opposite the stem to the cluster, holding them close with my fingers of the left hand, then I pass a fine soft wire, about three inches long around, bringing the ends together, and with thumb and finger clasp and pull full against the paper, and hold the wire with the fingers of the left hand, then cross close against the paper, and with the thumb and finger give one twist. If done well it is all right. Our bags cost this year 70 cents per thousand.—I. LeDuc, Tryon, N. C.

English Walnuts.

At a meeting of the Western New York Horticultural society in January, some English walnuts were exhibited by J. Cosman, of Hilton, Monroe county, which attracted much attention. These walnuts were grown on a tree which was standing on Mr. Cosman's farm when he bought it thirty or more years ago. The nuts were pronounced by

leading horticulturists attending the meeting to be the finest they had ever seen.

George T. Powell, the well known horticultural expert, said that in a recent exhibit of English walnuts in New York city, of which he was judge, growers from all parts of the United States taking part in the contest, he gave the first prize to nuts grown on Mr. Cosman's tree in Hilton.

Successful Fruit Growers.

We have several sections in New York state where fruits of the different kinds are a specialty, where the owners of these fruit plantations are specialists in their line. Some of them are getting results from their farms that will equal the stories told by the "real estate boomers" of Hood River valley. There are instances where some of these fruits have yielded a net income year after year of 10 per cent. on a valuation of \$1000 per acre.

A careful investigation of these widely different results reveals the fact that the successful grower is a practical business man, that he has taken advantage of the information dug out and disseminated by the experiment stations and the college of agriculture, and always attends every farmers' institute and every horticultural society within reach.—B. J. Case, Sodas, N. Y.

Fruit Industry Growing.

According to J. D. Remington, special agent of the New York Central railway, the Central lines last year carried 3100 carloads of peaches out of the western New York fruit belt. As there are more trees not in bearing than there are in bearing, he estimates that within seven years the railroads will be called upon to move 10,000 cars of peaches out of this district during the peach season.

Mr. Remington also says that thirty years ago not a carload of perishable fruit was shipped from the south to northern markets. Two years ago 85,000 carloads were shipped from the south to the north.

Ad Rate too High.—A woman went into a newspaper office and wished to advertise for her husband who had disappeared. When told that they charged two dollars an inch, she went out, saying that it would break her at that rate, as her husband was over six feet long.

Electric Railroads Big Money-Makers

I Am Building the Dan Patch Electric Railroad and Offer You This Opportunity to Make Money With Me in This Enterprise



I WILL GIVE YOU \$1000 IN VOTING STOCK, FREE, IN ADDITION TO YOUR SMALL INVESTMENT.

I BELIEVE I can show you the best electric investment opportunity that ever came to your notice—I firmly believe it and I have backed up my belief by a \$100,000 investment myself. I don't want you to say "yes" or "no" until you give me a chance to talk with you a little while. If you've got some money that you want to place where it will bring you big returns, or if you want to invest a little each month out of your income, just pin your faith to me for a little while until I can lay before you an investment proposition that strikes me as a great big money maker for the people, and the indisputable facts bear me out in my judgment—I want you to have all the facts and then I believe you will want to put your money where it will work for you and you only.

Now, the first thing to do is to send for my big 40-page "Book of Electric Railroad Facts," which I'll mail you free and at the same time I also send you my other book called "Why Wall Street Rules With the People's Money." When you get these two books which contain all the facts about the Dan Patch Electric Railroad and about me, personally, then I'm willing for you to sit in the quiet of your home and pass judgment on the whole proposition.

I just want you to have these two free books that will open your eyes about banks and Wall Street and investments in general; and when you get these two books I'll take my chances on whether you'll say "Savage is wrong" or "Savage is right," and it won't interfere with our feelings or friendship if you never invest a dollar or never write me again. I offer you these two books free—I want to show you how you can make your money work and earn for you. Now just a minute, while I give you a few facts. Perhaps nine out of ten readers of this paper know me already, but to those who do not, I've been doing a national and international business out of Minneapolis for the past 22 years.

My business is now the largest of its kind in the world—made so by the continued patronage of nearly three million thinking, progressive, hard working farmers and stockraisers.

These people are my friends and customers—many have already invested in my new enterprise—some from your own State and from every State in the Union and every Province in Canada. I have built up a number of big enterprises here in the Northwest and now I'm building the biggest of them all. The

WHY WALL STREET RULES WITH THE PEOPLE'S MONEY

BOOK OF ELECTRIC RAILROAD FACTS

Dan Patch Electric Railroad

Yes, the Dan Patch Electric Railroad, running from Minneapolis to Rochester, and back from Lakeville to St. Paul. I am not merely "thinking" of building this Railroad. I am really building it now—grading on the first section is about completed and we have started grading on the last division from Owatonna to Rochester.

I am working to make this the best constructed and biggest dividend-paying Electric Railroad in the country. High-class Electric Roads from New York to Spokane are great money-makers. I tell you all about it in my Big Book. This is the second time I have given the people a chance to share with me—my other enterprise paid 5 per cent in less than one year—the dividend checks were mailed out on June 1st.

Now is your chance to share with me in this enterprise—the greatest of them all. I will give you \$1,000 in voting stock in addition to a small investment. I want to send you the estimated net-profit statement, showing how a \$5,000 investment

grows to \$17,300.00. How a \$1,000 investment grows to \$2,450.00 in a single operating year. How a \$500 investment grows to \$1,225.00, and a \$100 investment to \$245.00 in a single operating year. This information is contained in my Big Book of Electric Railroad Facts. I want you to have it even though you never invest a dollar, and I am especially anxious for you to have my new Book, "Why Wall Street Rules With the People's Money."

Don't be backward about sending for these books. I want you to have them and they won't cost you a cent—they are free—some of these Wall Street secrets will open your eyes. I want you to see how the people's money works for Wall Street. I want to show you how to make your money work for you and for no one else. Send for the 2 books now.

M. W. Savage, President Dan Patch Electric Railroad, Minneapolis, Minn.

Dear Mr. Savage—I don't know whether I'll invest any money or not, but would like to have you send me your two Books—without any obligation on my part.—"Book of Electric Railroad Facts" and "Why Wall Street Rules With the People's Money."

Name _____
Post Office _____
State _____ Green's Fruit Grower.

M. W. SAVAGE, President, Minneapolis, Minn.

OUR CLASSIFIED ADVERTISING

This department is established for the benefit of the readers of Green's Fruit Grower who have anything to sell. The conditions: No display advertising will be placed in this department. The first three words only to be printed in capital letters. Each abbreviation and number will count as one word. No advertisement inserted for less than \$1. An advertisement containing fifteen words or less, will be inserted at \$1 per issue, additional words six cents each. We cannot afford to do any book-keeping at this rate and therefore cash must accompany every order. Orders must reach us not later than the 15th of the month previous to the month in which the advertisement is to appear. Five per cent. discount on orders to run three months or more.

Terms: CASH WITH ORDER. Address, Green's Fruit Grower Co., Rochester, N. Y.

FOR SALE

IF YOU WANT to buy, sell or exchange property, any kind, anywhere, address Northwestern Business Agency, Minneapolis, Minn.

FRUIT FARM—Thirty-five acres, four thousand trees, twenty acres berries. Particulars, Alva Cathcart, Bristol, Indiana.

BLACK LANGSHANS—Farm range birds, descendants of winners. Eggs 5 cts. each. Langshan Barnes, Winchester, Ky.

SINGLE COMB BUFF LEGHORN Eggs. 13, \$1.00; \$5.00 per 100. Safe delivery; good hatch. Card free. John Ahrends, Sunman, Ind.

FOR SALE—Ten acre, improved, irrigated, good roads, close to school, church and electric line. R. F. D. No. 1, Box 70, Rathdown, Idaho.

DAY OLD CHICKS—For sale—900 per day, 10 varieties, from fine stock. Shipment guaranteed. Booklet free. Old Honesty Hatchery, Dept. G, New Washington, Ohio.

CASH FOR YOUR FARM or Business.—If you want to buy or sell any kind of business or property, anywhere at any price, address Frank P. Cleveland, Real Estate Expert, 2855 Adams Express building, Chicago, Ill.

GOVERNMENT FARMS FREE—Official 112-page book "Vacant Government Lands" describes every acre in every county in U. S. How secured free. 1910 diagrams and tables. All about irrigated farms. Price 25c postpaid. Webb Pub. Co., Dept. 71, St. Paul, Minn.

EASTERN SHORE FARMS—Why go to the North and West when you can buy a farm clear of rocks and stones, near all the large markets of the East, mild climate, productive land, good water, for one half the price. Write for our special bargain list. J. A. Jones & Co., F. Salisbury, Md.

MISCELLANEOUS

DUROC PIGS \$7. Pedigreed White Rock Buff Leghorn eggs, \$1.50. S. Weeks, De Graff, O.

DAHLIA BULBS—20 choice named kinds sent post paid to any address in the U. S. for \$1. C. Peirce, Dighton, Mass.

DAHLIAS—Twenty kinds, \$1.00. Satisfaction guaranteed. Write for full particulars. Catalogue. H. Burt, Taunton, Mass.

STRAWBERRY PLANTS and Asparagus roots. Catalog free. All the leading varieties and at prices that are right. C. Peirce, Dighton, Mass.

BROTHER accidentally discovered root will cure both tobacco habit and indigestion. Gladly send particulars. G. Stokes, Mohawk, Florida.

MILLIONS of early and late vegetable plants for sale, transplanted or not, all kinds and varieties; also geraniums, coleus, cannas, salvia, pansies, etc., for bedding and decorating purposes. Write for prices. Bryan's Flower and Truck Farm, Washington, New Jersey.

SEA SHELLS—The wonders of old ocean, fine colors, odd forms, 25 shells, each a different variety, for 25 cents. Stamps taken. Large, showy shells and curios for fairs, church bazaars, on commission. Write me. J. F. Powell, Waukegan, Ills.

MEN WANTED—To prepare for next railway mail, internal revenue, customs and postoffice examinations. \$50.00 to \$125.00 monthly. Annual vacations. Short hours. Rapid advancement. No "lay offs." Common education sufficient. Country and city residents stand equal chances. Political influence unnecessary. Over 15,000 appointments to be made this year. Write immediately for schedule showing dates and places of coming examinations. We are preparing candidates free. Franklin Institute, Dept. 8-68, Rochester, N. Y.

LABORERS WANTED AT GREEN'S FRUIT FARM.

At Green's Fruit Farm we have two cottages with garden. We want to employ two men to work from April to December, 1910, with families to occupy these cottages. Location is about two miles from depot, one mile from village, seven miles from city. Rent for cottages, \$60 per year. Good wages for good men. Write us, stating age, what kind of work you are accustomed to, with full particulars, size of family, etc. GREEN'S NURSERY COMPANY, Rochester, N. Y.

Bees and Fruit

You know that you must depend upon honey bees largely for the pollination of fruit blossoms. Why not keep bees yourself and reap double benefits? A few hives will make a big difference in your fruit crop and the honey you will harvest the first season will more than pay for the initial outlay. It isn't much work either.

Subscribe to Gleanings in Bee Culture

And learn what others are doing and what you can do. It gives all the latest information on the subject. \$1 per year semi-monthly; six months' trial for 25 cents. Send your subscription to-day and ask for our new catalog and a booklet on bee culture. We will send them free and cheerfully answer all your inquiries.

THE A. I. ROOT COMPANY,
Box 28, Medina, Ohio.

GREEN'S FRUIT GROWER

AN ILLUSTRATED MONTHLY JOURNAL.

GREEN'S FRUIT GROWER CO., Publishers.

C. A. GREEN, Pres. and Treas.

R. E. BURLEIGH, Vice-Pres.

J. W. BALL, Sec'y.

Charles A. Green, Editor.

Prof. H. E. Van Deman, Associate Editor.

Price, Three Years for \$1.00. Postage Free.

Office, Corner South and Highland Avenues.

Rates for advertising space made known on application.

Entered at Rochester Post Office as second class mail matter.

Subscribers who intend to change their residence will please notify this office, giving old and new addresses.

OUR ADVERTISERS.—We believe that the advertisers using space in Green's Fruit Grower are a worthy and deserving class of business men. It is not our intention to permit the insertion of any swindling advertisement in these pages. If any subscriber has been defrauded by any advertisement appearing in Green's Fruit Grower he will do us and the public at large a service by at once reporting this advertiser to us, giving full particulars. Upon receipt of this complaint we will investigate the affair and will do everything in our power to bring about a satisfactory adjustment. If we find that any advertiser has defrauded our readers, we will deny him space for his future ads. in these pages.

CURRENT COMMENT.

—We knew our subscribers would appreciate the April number of the Fruit Grower. We have received many letters stating it to be the "best number yet." Thanks for these kind words of encouragement.

—According to the census, in the year 1905, there were manufactured in the United States 254,314,512 needles, valued at \$1,518,411, and 19,711,840 pins, valued at \$2,632,656, with a capital invested in the business of over \$5,000,000.

—In the last ten years the United States government has spent \$47,000,000 for the promotion of agriculture. That is an enormous sum, but how does it compare with the cost of militarism? In the same time the expenditure on the army and navy of the United States has run up into two billion dollars.

—There are six really big shoe factories in the United States. These turned out 25,000,000 pairs of shoes last year. Shoes to the value of \$10,000,000 were sent abroad, and the remainder, valued at \$340,000,000, were used in this country. Although the trade in rubbers increases every year, only \$70,000,000 was spent for such things last year.

—We are always glad to get photographs from our readers. Photographs of fruits, orchard and berry scenes with the whole family at work are the ones we want. We like photographs of cherry, peach and pear orchards. Send in any that you know are fine and write your name and address in the center of the photograph on the back.

—Old mother earth, who has closely guarded her age for her entire life, is 400,000,000 years old, according to an article which appeared in the current number of a geological publication of the University of Chicago. In more scientific phraseology, the approximate age of the earth, it has been discovered, may be determined by dividing the union of salt in the sea by the amount brought down each year by the rivers that empty into it. Sir John Murray, Professor Joly and M. DuBois, all famous geologists, stand back of the new method of computing the age of this terrestrial sphere.

—Even if the tail of Halley's comet should wrap itself completely around the earth during the next few weeks, none of the dire results predicted seems at all plausible, according to Professor George C. Comstock, director of the Washington Observatory at the University of Wisconsin. "The gases which form a part of the so-called tail are too attenuated to affect the atmosphere of the earth in any way, and will probably not be perceived at all. The particles composing the tail are probably too small to furnish visible meteors. It now seems improbable that there will be any method whatever of knowing that the earth is actually passing through the tail, save by computing afterwards that it must have done so."

In parts of the United States it has been the practice for some years to use railway trains in connection with farmers' institute work. Cars in such trains have been fitted out for the purpose of affording demonstration in corn culture or some other line of farm work, and accompanying the train went institute speakers who addressed meetings at each stopping place. The same general idea has been adopted, in a modified way, in the western provinces of Canada. England is now following suit. During the present month a train started from Paddington for the purpose of giving a stimulus to the poultry industry of the west of England and Wales. The train stopped wherever a company of country residents collected, and lecturers used the roofs of the carriage for a platform, while others gave demonstrations in the use of incubators and other matters connected with poultry production.

—All the world loves a bargain.

—An ounce of prevention is worth a ton of detection.

—The lemon product in California is rated at 1300 carloads.

—More than four million persons attend moving picture shows every day in the United States according to Professor Chas. Sprague Smith, of Columbia University.

—Alfalfa is very long-lived. Its usual life in the United States is probably from ten to twenty-five years, although there is a field in New York that has been mown successfully for over sixty years.

—New York has three state prisons, and must soon have a fourth, as 4320 convicts occupy 3600 cells, and 621 are out on parole. The prison population is increasing rapidly and is now 964 greater than it was two years ago. There are 1091 foreign born prisoners and the state department of prisons believes that most of them should never have been permitted to enter this country.

—A rough estimate of the amount of money in circulation throughout the world on November 1st places the total at \$15,550,000,000. This includes gold, silver and unconverted paper. Gold comprises nearly half of the entire world's currency. If it be estimated that about half of the fresh gold produced from year to year goes into the form of coined money there will have been approximately \$400,000,000 added to the supply during the last two years.

—One of the most distinguished of dogs is dead on Flag Island in Casco Bay, near Commander Robert E. Peary's summer home on Eagle Island. The canine was the last survivor of the deep chested, powerful muscled and courageous brutes that Peary selected as the best of all the hardy breed of the frozen north to take him and Mat Henson on the final successful dash to the pole. The half wild creature was also with Peary when the explorer reached furthest north, three years ago. So attached did the commander become to the faithful dog that he brought him back to his Casco bay home.

—The net earnings of the United States Steel Corporation for the three months ending December were \$34,400,000, or at the rate of nearly eleven and one-half million a month. This corresponds, taking these figures as a basis, estimates that on thirteen million tons of steel made by the trust last year the actual profit amounted to more than \$10 a ton. Andrew Carnegie, in a statement before a Congressional committee of enquiry some months ago, estimated the cost of making steel in the United States at a little over \$13 per ton. If these two estimates are correct, the United States Steel Corporation has an actual profit in the making of its goods almost equal to the cost of manufacture. No wonder the crop of millionaires in the United States is so rapidly increasing.

—Transportation of the mails by railways, steamship lines and various star routes cost the government during the fiscal year ended June 30, 1909, \$83,493,762. These are the figures given in the annual report of Joseph Stewart, second assistant postmaster general. The number of railroad routes employed by the department was 3316, aggregating 217,115 miles. The total expense of the railway service for the year was \$45,054,548. For the fiscal year of 1911 it is estimated that the expenses for railroad transportation will be \$46,260,000. The result of the readjustment of the pay for railroad transportation, effective July 1, 1909, for the ensuing four years, based upon weighing of mails, shows a decrease of \$494,360, or 5.08 per cent., and for railway postoffice car pay a decrease of \$3195, or 29 per cent.

—There are more than 41,000 rural free delivery carriers in the United States. They daily travel 1,000,000 miles, visiting 4,000,000 families—in all 20,000,000 people. New rural routes are being established each month and in the near future this great service will employ 50,000 carriers and 50,000 substitutes.

—Roger W. Babson, of Boston, in a recent address in Chicago, declared that prices in one hundred leading commodities have doubled or tripled since the time of the Chicago World's Fair. He gave these six reasons as the causes: Trusts, Tariff, Over-production of gold, Overspending, Wholesale desertion of the farms for the cities, Great increase in money spent for luxuries. The two prime causes, Mr. Babson declared, are over-spending and too great a taste for luxuries.

—Dr. Harvey W. Wiley, head of the chemistry bureau of the department of agriculture, says that people can live almost as well and as cheaply now as they could ten years ago if they are willing to look for the right things in the right places. "Of course," he adds, "food manufacturers are guilty of a good deal of extortion. Do you know how much a bushel of wheat is worth when made into breakfast foods? Ten dollars. Plain cracked oats or corn meal would be more wholesome, more nutritious and a great deal cheaper than any of the new fangled sawdust foods. There is more or less swindling in canned goods, too. The canned goods manufacturers ought to be made to fill up the cans, leaving a reasonable space, of course, for swelling and then pour water into the chinks. The way things are now the cans are often only three-quarters full when opened."

—The appropriation for the Department of Agriculture passed by the Sixty-first Congress, is the largest ever granted this department by any congress by \$547,600. The amount of the bill last year was \$12,985,036. The one just passed calls for \$13,522,636. This is a large amount of money to be expended in one year, and it may be of interest to know how and for what it is used: The appropriation is subdivided for use in the several divisions of the department about as follows: Secretary's office, \$260,970; weather bureau, \$1,526,260; bureau animal industry, \$1,803,206; forest service, \$4,968,500; bureau of chemistry, \$970,700; bureau of soils, \$231,020; bureau of entomology, \$527,180; bureau of biological survey, \$86,920; division of accounts and disbursements, \$79,990; division of publications, \$202,730; bureau of statistics, \$220,320; library, \$35,320; contingent expenses, \$100,000; office of experiment stations, \$1,146,680; office of public roads, \$114,240. The increases are due to new work and the natural growth of the department as a whole.

Back to Nature.

Tell me, O cow, with tranquil air,
Feeding in pastures green,
Why is that you always wear
An attitude serene?
No indigestion mars thy dreams,
No cramps provoke thy cries.
"It is," the knowing cow replied,
"Because I Fletcherize."

—Saved His Life.—A story is told of an Englishman who had occasion for a doctor while staying in Peking. "Sing Loo, greatest doctor," said his servant, "he save my life once." "Really?" queried the Englishman. "Yes; me tellible awful," was the reply; "me callee in another doctor. He give me medicine; me velly, velly bad. Me callee in another doctor. He come and give me more medicine, make me velly, velly badder. Me callee in Sing Loo. He no come. He save my life."—Birmingham (England) "Post."

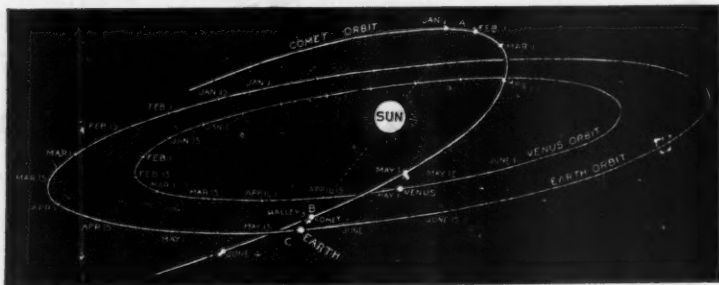
Policing the Air.

"The recent seizure of Mix, the American, and his balloon by Russian troops after he had landed on Russian territory in the international race for the James Gordon Bennett cup, is indicative of the jealousy with which European powers guard their frontiers from attempts of possible foreign spies to pass them," writes R. B. Kidd, in the issue of "Harper's Weekly" for March 12th. "Although there is no specific provision in the American statutes that would seem to cover this question, . . . so far as an air-craft, hovering now about our military reservations, or fortifications, or navy-yard is concerned, the authorities could and undoubtedly would take summary action, if it were deemed necessary."

The Wonder of Blood Transfusion.

There is nothing more dramatic in surgery than a transfusion of blood—to see the patient take on the rosy hue of health, waken out of his lethargy, show an immediate live interest in his surroundings and actually recover under the eye of the operator. In adults we must not permit the amount transfused to equal the normal for fear of suddenly overtaxing the heart, but in the case of young children who have had severe hemorrhages there may be complete recovery without a period of convalescence, so that at the termination of the operation the patient is well.—From Dr. Howard Lillenthal's "Current Progress in Surgery," in the April "Century."

The Laws of Life.—This is the title of a new book by G. D. Ballou, of Los Angeles, Calif. It is a valuable book with cloth cover, over one hundred pages, illustrated. I have known the author for many years. He has attended me when I have been ailing. His former home was Rochester, N. Y. This book is worth many times its cost to anyone who desires to enjoy good health and long life. Such books usually sell for \$1.25.



THE ORBITS OF THE COMET, EARTH, AND VENUS AROUND THE SUN.

Exact astronomy is to-day so absolutely true and efficient that although Halley's Comet has made his long 75-year trip away from home, his return to the sun or arrival at perihelion, the point nearest the sun, has been calculated almost to the hour. The comet passed the sun April 19, and will not be at its best until late in May. It is now rushing sunward through our western sky at the rate of about 100,000 miles per hour, and when we think of the possibility of a collision with such an object, we are glad that he will get no nearer than 15,000,000 miles—about three times as far away as he was on his last return in 1835.

The Worst Teacher.

That teacher was the worst we ever tackled.
He warn't so very tall, and he was light.
—It is best to lay your egg before you've cackled.
Though we never had a notion he could fight.

For he acted sort of meechin' when he opened up the school.
—We sort of got the notion he was it—and we tagged gool.
We gave him lots of jolly in a free and easy way.
And showed him how we handled guys as got to actin' gay.

We showed him where the other one had torn away the door.
When we lugged him out and dumped him in the snow the year before.
And soon's he thought we had him scared, we sat and chawed and spit.
And kind o' thought we'd run the school—concludin' he was it.

That teacher was the worst we ever tackled.
He warn't so very tall and he was light.
—It is best to lay your egg before you've cackled.
Though we never had a notion he could fight.
—Holman F. Day, in the Lewiston "Journal."

Bury Trees One Day, Root and Branch, If Dry When Received.

When trees are shipped in bales it is impossible that they be received in a moist condition if their journey has been a long one. If fruit trees or others of a deciduous nature it does not follow that dryness materially hurts them. If unpacked at once and buried up root and branch in the ground for a week many of them will be as good as new. Fruit trees usually come around in good order after such burying, and so do most all other deciduous trees. But it is different with evergreens. If these be allowed to become dried out there is but little hope for them. Their sap is of a nature that refuses to flow again as it once did; and then it is not possible to bury the whole tree root and branch as it is with the deciduous stock mentioned. When ordering trees the nurseryman should be cautioned to use great care in the packing, that the stock may reach destination in good condition. Some firms charge for box packing, others not; it is essential to have it well done, whatever the rule may be regarding charges.

The Prospects for Fruit Growing in Western New York This Year.

Great fears were entertained that the unusual warm weather of March would extend the fruit crops of peach and other fruits so that they would be destroyed later by frosts but such has not been the case up to this date, April 24th. Peach buds are not injured. There are more live buds here than have been seen for many years. Fruit trees, plants and vines of various kinds have wintered well in this section there having been severe winter weather. It looks now as though we would have an average crop of pears, plums, cherries, quinces, grapes and the small fruits and a marvelous crop of peaches. Last year there was shipped over the New York Central railroad over three thousand carloads of peaches from this section. This year the crop is estimated over five to six thousand carloads.

P. S.—Since writing the above I hear of severe frosts at the west, especially in Indiana, which may have injured fruits there.

Plant Lice.

A government report states that the "Practical Counselor for Fruit and Garden Culture" of Frankfurt recently offered a prize for the best method of destroying plant lice, for which fifty-eight persons competed. The prize was awarded to the author of the following preparation: Quassia wood, two and one-half pounds, to be soaked over night in ten quarts of water and well boiled, then strained through a cloth and placed, with 100 quarts of water, in a petroleum barrel, with five pounds of soft soap. The mixture is then ready for sprinkling on plants infested with lice. Leaves, even those of peach trees, will not be injured in the least by the solution, which can be kept covered in the barrel from spring to fall without deterioration. As soon as lice appear the leaves should be sprinkled with the solution. If this is repeated several times the pests will disappear.

Maple sugar fudge with nuts is made of three cupfuls of sugar, one cupful of maple sugar and one cupful of milk. Boil fifteen minutes, add a lump of butter the size of an egg, a small quantity of vanilla and a cupful of chopped walnuts or pecan nuts. Beat briskly for a few minutes, pour into buttered pans and, when nearly cold, cut into squares.

Milk will take out inkstains from boards, cotton and other fabrics if used before dried in. Soak in a little milk and then wash in the ordinary way.

Enriching Orchards.

Along with the cultivation should go a liberal amount of fertilizer. In the use of fertilizer in orchards, you must avoid too much nitrogen, says C. G. Woodbury, Purdue Experiment Station. For this reason heavy mulching with barnyard manure is to be recommended only for such orchards as indicate by their small annual growth, and by their scanty and light colored foliage that nitrogen is lacking. For soils of fair natural fertility and where a nitrogen gathering cover crop, such as clover, crimson clover, cow peas or vetch may be grown, the following formula is suggested:

A thousand to 1500 pounds per acre of a mixture containing one part (100 pounds) each of ground bone, acid phosphate, and muriate of potash. On soils that are somewhat exhausted, 125 pounds nitrate of soda may be used in addition.

In order to get the greatest returns from this fertilizer, it should be thoroughly worked into the soil. This can be accomplished very well, by applying it to the surface just before plowing. The plowing and working of the ground will get the fertilizer pretty thoroughly incorporated and the trees will soon show the beneficial effect of its presence.

After the neglected orchard has been thus treated, an intelligent application of the spray pump will generally complete its cure.

Benefits of Drainage.

"Rural Life" gathered these points in favor of drainage from Dr. Elliott's address before the New York State Drainage association at Ithaca:

Tile drainage tends to modify the temperature, and helps to prevent loss from late frosts.

The bacteria so necessary in our soils is encouraged and flourishes in a drained soil.

The object of drainage is to get a movement of surplus water and leave enough in the soil for the needs of the plant.

Drainage of land defies climate and natural conditions.

In the west large tile is used and placed farther apart than the small tile formerly used.

It is impossible to injure clay soil by drainage.

Much money has been wasted in drainage. This proves the necessity for expert planning and intelligent management.

Dragging the Roads.

An Iowa road superintendent says all earth roads without exception should be dragged after each rain when in proper condition, and the time to drag can be learned only by experience as some soils and localities dry much sooner than others. Roads should be dragged to and from the center so as to maintain the proper slope, and in very dry weather when dust is deep they should be dragged from time to time outward and after a rain plastered back upon the surface.

Excellent results can be obtained by the use of good, clear cinders, first class sand or gravel upon the surface of a road by mixing four or five inches of either cinders or sand with an equal amount of either hill black or gumbo soil by rolling each layer of about two inches, and two or three inches of the gravel by rolling it into the surface of the road when it is as moist as possible.

A Comet's Tail.

The tail of a comet is composed of gas, existing in a highly rarefied condition. Little particles of electricity called corpuscles, or ions, are being constantly given off at enormous speed by the sun. Each meteorite in the comet's head is surrounded by its own rarefied atmosphere. When one of these ions strikes one of the molecules of gas in the comet's atmosphere, it carries it off with it to form the tail. The electrical charge makes the gas luminous, and it is by this light, and not by reflected sunlight, that the tail is made visible to us. A comet's tail, therefore, seems to be merely a very extended aurora.—From William H. Pickering's "The Return of Halley's Comet" in the April "Century."

The Currant Worm.

When the leaves of the red and white currants are half size in the spring, spray with a solution made of three-quarters of a pound paris green to forty or forty-five gallons of water.

Spray when leaves are half opened. If left till later the currant worm will get the start. Apply on a sunny day. If rain falls inside of twenty-four hours, repeat the operation and repeat again in about ten or fourteen days.

You need not fear the effects of the currant worm if these directions are followed. Do not forget to spray first when leaves are "half open." The black currant needs no spraying.

Get out of the rut

Give your buildings the benefit of progress—same as you give the farm itself. Cover every building on the farm with Genasco Ready Roofing—the economical roofing that protects and lasts.

Genasco Ready Roofing

is made of Trinidad Lake asphalt—Nature's everlasting waterproofer. It prevents cracks, breaks, and leaks, and does away with damage and repairs. Easily applied without experienced help.

The Kant-leak Kleet does away entirely with cement and large-headed nails. Keeps seams absolutely watertight. Saves time in laying. Makes a beautiful finish. Ask for Genasco rolls with the Kleet packed in them. Ask your dealer for Genasco. Mineral or smooth surface. Be sure you see the hemisphere trade mark. A written guarantee, if you want it. Gold medal (highest award) Seattle, 1909. Write for samples and the Good Roof Guide Book.

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Our Burden Bearer.

The little sharp vexations and the briers that catch and fret.
Why not take them all to the Helper, who has never failed us yet?
Tell Him about the headache, and tell Him the longings, too.
Tell Him the baffled purpose when we scarce know what to do.
Then, leaving all our weakness with One divinely strong,
Forget that we bore the burden, and carry away the song.
—Phillips Brooks.

Helpful Lady Bugs.

Their red dresses are decorated with black polka dots. They are always man's friend, and get most of their living by preying on the destructive soft-bodied plant lice, the most common of which is the green aphid, commonly found on house plants and rose bushes. In the study of the green aphid it was found that a species of lady bugs preyed upon this pest. The former were observed to go down among the roots of the grain in the field in search of the aphides, and to pass the winter along with them in that situation. The bright colored larvae of the lady bug also live principally upon insects which are destructive to garden and field crops. Don't kill the lady bug.



Syracuse Red Raspberry

BEST NEW HARDY BERRY. This is the largest and best of all. Well tested at Green's Fruit Farm. It is a vigorous grower and a great producer. It remains bearing for six weeks. Bright red in color, firm and of high quality. Introduced and for sale only by **GREEN'S NURSERY CO., ROCHESTER, N. Y.**

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is now open for settlement at Fort Stockton, Tex. Richest soil in Pecos Valley, limestone formation, (no gyp) natural flow of pure spring water exceeding 55,000,000 gallons per day for irrigation and domestic use; irrigation system completed and in full operation now; no waiting for water; assured profits of \$100 to \$1,000 per acre, no drought; no crop failures; finest all year round climate in the United States; altitude 3,050 feet above sea level.

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Fort Stockton is county seat of Pecos County and important division point on the Kansas City, Mexico and Orient Railway, now under construction. Has 55,000 acres of the finest irrigated land the sun shines on; adjacent to town. Population now 1,000, will soon be a city of from 10,000 to 15,000. Greater opportunities for home seekers and investors than were offered in the older irrigated districts, where orchards are valued at from \$2,000 to \$5,000 per acre. Those who have investigated irrigated districts of New Mexico, Colorado, Utah, California, Oregon, Washington, Idaho, etc., say this is the finest body of irrigated land they ever saw. This is one irrigation project where the water supply has not varied in 50 years; where every drop of water used for irrigation is good to drink and where there is water in abundance for every acre of land that is irrigable. Choice locations open to those who investigate now. You cannot afford to buy land anywhere without seeing Fort Stockton. Low rate excursions the first and third Tuesdays of each month. Write for full particulars today.

REFERENCES: First National Bank, Kansas City, Mo., 1st State Bank, Fort Stockton, Tex. Prospectus, map and illustrated folder describing these lands mailed free to all who address Fort Stockton Irrigated Land Company 607 Fidelity Trust Bldg., Kansas City, Mo.

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He kissed the postage stamp upon the letter that she sent. In fact he licked the mucilage off and into raptures went. He wrote and told her what he did. And then his love near froze. When she replied "I moistened that stamp on dearest Fido's nose."
—Montgomery Advertiser.

Mr. Knowsitt.—Wise men hesitate. Only fools are certain. Miss Kutting.—Are you sure? Mr. Knowsitt.—I am certain of it.

Mrs. Youngbride.—Mrs. Smith says there is lots of cream on her milk bottles every morning. Why is there never any on yours? The milkman.—I'm too honest, lady, that's why. I fills my bottles so full that there ain't never no room left for cream.—"Woman's Home Companion."

"My dear," said the wife of the eminent professor, "the hens have scratched up all that eggplant seed you sowed." "Ah, jealousy!" mused the professor. And he sat down and wrote a twenty-page article on the "Development of Envy in the Minds of the Lower Grades of Biped."—"Democratic Telegram."

Tourist.—Where's the bulldog I sold you the other day, Mick? Mick—Oh, the poor baste swallowed a tape measure and died, sorr! Tourist (waggishly)—He died by inches, eh? Mick—No, sorr! He went round the back of the house and died by the yard.—London "Opinion."

The Mourner.—The minister has just been giving the class a lesson on the Prodigal Son. At the finish, to test what attention had been paid to his teaching, he asked: "Who was sorry that the Prodigal had returned?" The most forward youngster in the class breathlessly answered, "The fattened calf!"—"Home Herald."

He—"I suppose you will erect a handsome monument to your husband's memory?" The Widow—"To his memory? Why, poor John hadn't any. I found his pockets full of letters I'd given him to post."

"Johnny," said his mother, severely, "some one has taken a piece of ginger cake out of the pantry. Johnny blushed guiltily. "O, Johnny!" she exclaimed, "I didn't think it was in you." "It ain't all," replied Johnny, "part of it's in Elsie."

A Magic Healer.—During an exciting game of baseball a player had two fingers of his right hand badly bunched up and on his way home from the grounds he dropped into a doctor's office to have them attended to. "Doctor," he asked anxiously, "when this paw of mine heals will I be able to play the piano?" "Certainly you will," the doctor assured him. "Gee! but you're a wonder, Doc. I never could before."—"Exchange."

"Shake before taking," read the fever-and-ague victim from the label on the bottle of medicine. "Talk about your sarcasm," he said to himself, "that is sure the real thing." Making it Homelike.—Hotel Keeper (to Arctic explorer)—"Shall I have some ice put in your bed?"—"Fliegende Blaetter."

Too Popular.—Heard about Jones? No. What? He's dead. He tried to live up to his reputation.

"I hear Jones the sea captain is in hard luck. He married a girl and she ran away from him." "Yes, he took her for a mate, but she was a skipper."—"Princeton Tiger."

Not on a Pleasure Trip.—Laborer—The master's gone away. Visitor—Oh, for a holiday? Laborer—I don't think so. He has taken the missus!—"Punch."

Her Own Invention.—"It was Satan," said a mother to one of her children, "who put it into your head to pull Elsie's hair." "Perhaps it was," replied the hopeful, "but kicking her shins was my own idea."

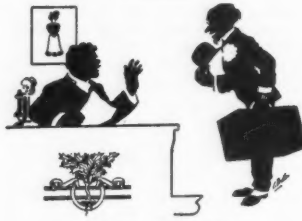
Big Game.—Daughter—Did you have to fish much, mamma, before you caught papa?

Mother—Fish, my dear, fish! I was bear hunting.—M. A. P.

Sportsman (to Snogson, who hasn't brought down a single bird all day)—Do you know Lord Peckham? Snobson—O, dear, yes! I've often shot at his house. Sportsman—Ever hit it?—"Just Fun."

An Honest Confession.—"Do you think you can take a good photograph of me?" queried the woman who had not even received honorable mention at a beauty show.

"I'm sorry, madam," replied the picture producer, "but I shall have to answer you in the negative."



A New Invention.

"I'm introducing a brand-new invention—a combined talking-machine, carpet-sweeper, and a letter opener," said the agent, stepping briskly into an office.

"Got one already," answered the proprietor. "I'm married!"—"Harvest World."

Sweet Enough.

English Girl—You American girls have not such healthy complexions as we have, I can not understand why our noblemen take a fancy to your white faces.

American Girl—It isn't our white faces that attract them, my dear; it's our greenbacks.—"The Wasp."

Hard Luck.

The Lady—Why don't you go to work and earn an honest living instead of begging?

The Hobo—I can't get no work at me profession, ma'am. Dat's de answer. The Lady—What is your specialty? The Hobo—I'm a professional bomb-thrower, ma'am.—Chicago "News."

Analysis.

There was once a young man who was paying court to three different beautiful damsels. Each was fair, each was sweet, each was charming—so much of triplicate similarity did they have that he did not know how to choose between them. So he went to a wise old man and laid his troubles before him.

"Is there a clock at each house?" asked the wise old man.

"There is."

"And what does Esmeralda say when the clock strikes 11?"

"She says the clock is slow."

"What does Eulalie say?"

"She says the clock is just right."

"And what does Evangeline say?"

"She always says the clock is fast."

"My son, there is no need for further evidence. Evangeline is the one that really loves you."—"Judge."

Foolin' Weather.

Look out—the weather's foolin' you—the sun shines warm an' bright. But the winds may whistle an' you'll freeze before daylight.

So don't fergit your cover when you go to bed at night.

The weather's like a woman—jes as whimsical an' you

Never know one minute what the next one they will do.

But we couldn't live without 'em—an' you know it's shorely true!

—Montgomery Advertiser.

Cheering Him Up.—"Bill," said the invalid's friend, "I've come to cheer yer up a bit like. I've brought yer a few flahrs, Bill. I thought if I was too late they'd come in 'andy for a wraef, yer know. No, don't get down'earted, Bill. Lummy, don't yer look gashly! But, there, keep up yer spirits, ole sport; I've come to see yer an' cheer yer up a bit. Nice little room yer 'ave 'ere; but, as I says to meself when I was a'com'n up, wot a orkard staircase to get a coffin dahn."—London "Globe."

How a Good Apple Crop was Secured.

Henry E. Allen relates in the Benton Harbor "News" how a neighbor treated an old orchard and his own and got a fine crop of apples this year while others about him got none. He is Porter Bryant, and he got \$1200 for his fruit in the orchard—\$400 for the fall fruit, and \$800 for the winter. Asked how he secured such a fine result, Mr. Bryant said: "I did it by thorough cultivation and spraying. I bought an orchard near my own, and one-half of it I treated about the same as my own, beginning in the spring. The other half of this orchard was not sprayed or cultivated as it should have been, so the result was that the half I tended had nearly as good a crop of apples as my own orchard, while the other half did not pay expenses."

Rapid Motion of the Comet.

The comets whose periods are less than one hundred years are called periodic comets, and nearly half of them have been observed more than once. At present they number forty-five, but only three of them are retrograde; that is, revolve in their orbits in the opposite direction to the planets. Halley's comet is one of these three, and as a result it will pass us with a very rapid motion. At that time the earth will be moving in its orbit at a speed eighteen miles a second, and the comet in nearly the opposite direction at a speed of twenty-five miles. The relative motion is therefore about eighty times that of a cannon ball.—From William H. Pickering's "The Return of Halley's Comet" in the April "Century."

Cut a snip off the ends of potatoes before they are roasted. This lets out any stray moisture and makes the potato mealy.

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Save \$25 to \$50 direct at my factory price—freight prepaid. Get the only Separator that runs in "Bath of Oil," like a \$5,000 automobile. This alone is worth \$50 extra, but costs you nothing extra.
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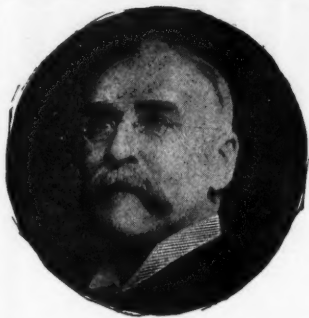
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How I Made the Old Farm Pay

More Than 100,000 People Have Already Read

This Book. New Edition of 30,000

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INTRODUCTION.

My object in giving my experience as a boy on the farm, as a business man in the city, and, again, as a fruit-grower, is not to boast of the very modest success which I have attained, but to be helpful to others, who are continually asking: "What can we do to make the farm more profitable?"

Surely, I have solved this problem for myself. I have made a run-down farm, exhausted of fertility and dilapidated in every way, remarkably profitable through a series of years when great depression prevailed throughout the farming community. I have done this as a city man, leaving the counting-house and going back into the country, from which I originally came. This also teaches that years of city life need not necessarily detract from the possibility of success when one returns to rural life.

My aim in referring to my childhood on the farm is with the hope that parents may draw some useful lessons therefrom, and that, perhaps, some of them now living in cities, may be induced to remove to the country as a means of making life enjoyable, not only to themselves, but to their children.

I LEAVE THE FARM.

I did not leave the farm without feelings of sadness. Here was my birthplace. Here I spent my childhood and early manhood. Under the shadows of those trees many problems of life had unfolded. Youth is a life itself, compared with which all the remaining years are prosy. Youth is a slowly unfolding dream, while mature age is practical, calculating, often harsh and repulsive. One must ever have fond memories of the spot where he has spent his childhood. But my hopes for the future were bright, therefore with a sigh for the old scenes I hastened on to greet the new. It is well that youth is impulsive and imaginative; were it not thus every enterprise would languish.

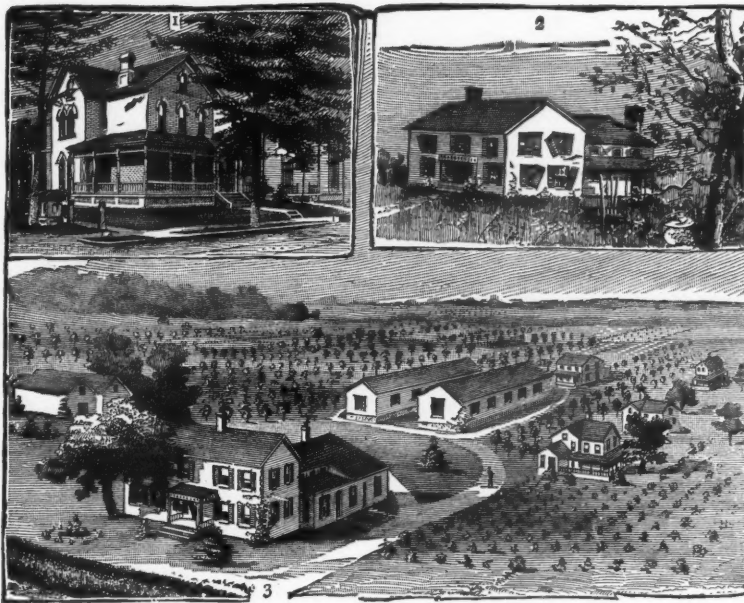
As I left the farm for the city in the stage coach, I found among the passengers a farmer neighbor. He advised me to have the courage on all occasions to do right and refuse to accept the social drink. I have often thought of this good advice. I recently met this man and thanked him for his kindness. A word of advice on such an occasion is not easily forgotten, and the result may not be easily measured. I wish here to give the same advice to all starting out as I then started.

There is a continuous tide from the country to the city. Parents who have laid by a moderate competency go to the city to educate their children, and to learn something of different phases of life. Young girls go to the city to pursue studies in music or stenography, or to take up dressmaking or millinery. Young men adopt city life in order to secure a better education, or to begin business for themselves, or as employees, with vague ideas as to results, but with bright hopes that all will in some way end well. The cities are rapidly growing, while the small towns and the farming districts are becoming less populous.

My experience teaches that in some cases people better their prospects by changing from country to city life. I know of farmers who have come into Rochester, N. Y., and have added to their capital, and led a contented life; of country girls who make double the money here that they could have made in the country; of young men who have become wealthy and distinguished here.

On the other hand I have known farmers to lose everything in trying their hand at such new ventures as the city affords; girls who were glad to get back to farm life after severe trials; young men broken down physically, financially and morally, who might have succeeded if they had remained on the farm.

Everything depends on ability, adaptability, opportunity and natural inclinations. Each must decide for himself.



CUT NO. 1 REPRESENTS THE CITY HOUSE WHICH WE LEFT. CUT 2 IS THE FARM HOUSE AS WE FOUND IT. CUT 3 IS SOMETHING LIKE THE FARM AS IT NOW LOOKS.

MY FIRST NIGHT IN THE OLD FARM HOUSE.

I remember the first night that I passed in this old farm house. I came up on the cars to the neighboring depot, and walked over to the farm across lots. I did not know any person within twelve miles of this farm. I was not aware whether my neighbors were horse thieves, murderers or church-going people. I knew nothing about the character of the inhabitants. When I arrived at the place there was not a soul there. The tenant had removed and I was alone in possession. Not entirely alone, as I found soon afterwards, for I heard the rats scampering in the walls overhead.

It was a cold, bleak, windy March evening when I arrived. There was no stove put up. I had a cot in one corner of the room where I proposed to spend the night. In this old-fashioned house there were numerous brick grates, such as our forefathers had used; in the kitchen, which I was occupying, were

the ancient andirons and cranes. To make things more cheerful, I gathered together chunks of wood and soon had a fire blazing in the old fireplace, which roared and crackled to such a degree that I began to have fears that it might burn the house up before morning.

Then the wind began to increase. I never knew the wind to rise so rapidly and to blow so fiercely. I discovered that window lights were out of almost every window sash in the house, and as the wind began to pour in I was compelled to make plans for better protection. In the course of an hour I discovered enough old straw and felt hats, etc., to stuff into every broken window pane in my room. These had to be braced with sticks to hold them in place. As the wind continued to rise, the blinds banged and the windows rattled in their frames. The loose shingles on the roof seemed to be keeping time to the storm without. The

winds moaned dolefully around the gable of the house. The branches of the trees scraped hoarsely against the building, and, to add to all, numerous rats began to scratch and scramble in the adjoining walls. I confess it was a dismal night that I passed in this house for the first time. Supposing these neighbors should fancy that I was a man of some wealth and should choose to cut my throat during the night, throw me into the well and escape with the ill gotten booty. Very pleasant thoughts on which to fall asleep! Nevertheless I did fall asleep, and was awakened during the night by the rats, which had increased in boldness until they passed over the bed with great complacency.

Then I bolstered myself partly upright in my cot and began to think. The more I thought the less sleepy I became. The partly burned chunks of knotty wood and the coals beneath sent out a feeble light. I could see the smoke rising lazily in the broad black throat of the ancient fireplace. What a story this hearthstone could unfold, of fifty years of toil and patient waiting of old time inhabitants! Of husbands and wives overworked for the little gain that each year brought them. Of births and deaths; of weddings and funerals; of Thanksgiving gatherings, of winter evening frolics.

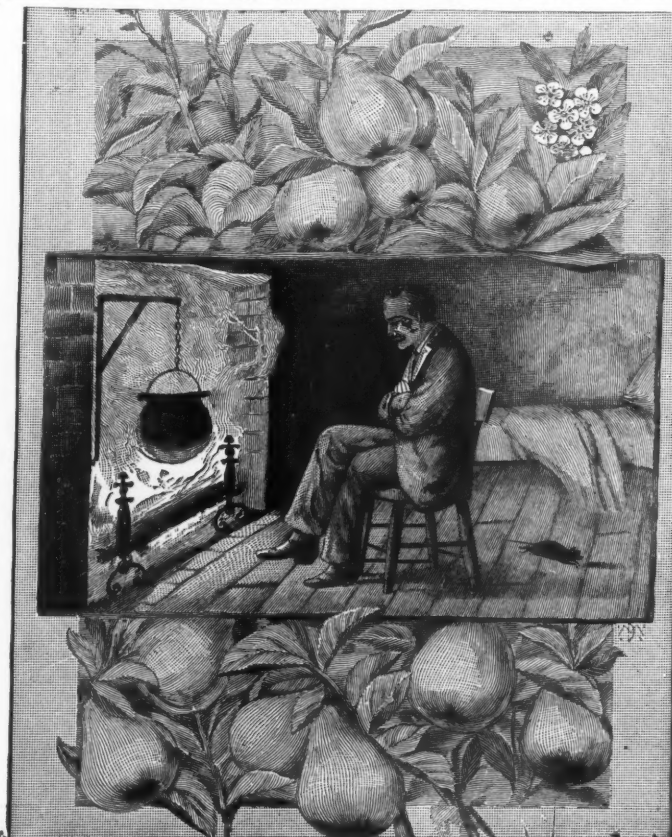
Perchance, before this fireplace many honest words of love were spoken, and many troths pledged. Where now are the many people who have in years gone by gathered here to be warmed and cheered? Most of them are sleeping in their graves. The hands which laid those bricks against which the smoke is curling have long ago crumbled to dust. The blacksmith who shaped those rough andirons will never make the anvil ring again with his noisy hammer.

What business have I here? Was this broad acreage cleared of rocks and stumps for me? Did the builder of this house have me in mind when he laid these foundations? No; it is but an inn for me, and I a traveler on life's highway, simply stopping over for a night. By and by others will come and warm themselves here, and I far away. What a queer thing is life! We live not for ourselves alone; we build for others; we dig and delve that others may reap. Even our ashes after we are buried fertilize the soil for future generations.

What are my prospects here? How shall I, whose hands are white and soft, compete with the brawny armed, sunburned men who get their living from the soil? Shall I, who have been devoting my thoughts and energies to other work hope to excel those who have spent their lives behind the plow? They are scarcely making both ends meet at pay day, though scrimping and saving and toiling with all their strength. How shall I, with my dainty, girlish, city wife, fight the battle here to a successful finish?

My friends have no hopes of my success with such a forlorn venture. They expect to see me sold out by the sheriff within a twelve month. Are they right? No; they are wrong! I will succeed. I must succeed. I will bend every nerve; I will strain every muscle; I will think and study. There is some way out, if I only find it, and find it I will!

The next morning opened clear, bright and cheerful, and supplies soon arriving I was prepared to keep bachelor's hall for several weeks, not desiring to bring my young wife, who was a city girl accustomed to city ways, to such a place until it had been improved.



The Book

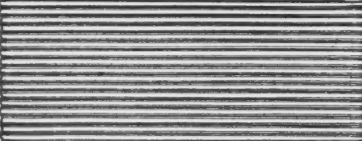
"How I Made The Old Farm Pay"

Contains more than 50 pages, 6 x 9 inches. The price of the book is 25 cents postpaid. We will send you Green's Fruit Grower three years and a copy of the book, "How I Made The Old Farm Pay," all for \$1.00. Address, GREEN'S FRUIT GROWER, Rochester, N. Y.

Wonderful ROOFING Offer!

SPECIAL SPRING PROPOSITION for QUICK ORDERS-NEW LOW PRICES


Corrugated Steel Roofing and Siding



1 1/2 inch unpainted steel sheets, light weight, 24 in. wide, 3 to 8 ft. long, 100 sq. feet.....	\$1.85
Painted, same as above, 100 sq. feet.....	\$1.95
1 1/2 inch corrugated, galvanized, rust-proof steel sheets, standard weight, 24 in. wide, 3 to 7 ft. long, 100 sq. feet.....	\$3.25

Read our Freight Prepaid Offer.

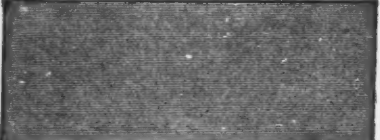
PRESSED BRICK STEEL SIDING



Pressed Brick, unpainted steel sheets, light weight, 24 in. wide, 3 to 8 ft. long, 100 sq. feet.....	\$1.85
Painted, same as above, 100 sq. feet.....	\$1.95
Pressed Brick, galvanized, rust-proof steel sheets, standard wt., 24 in. wide 68 in. long, 100sq. feet..	\$3.25

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FLAT STEEL SHEETS

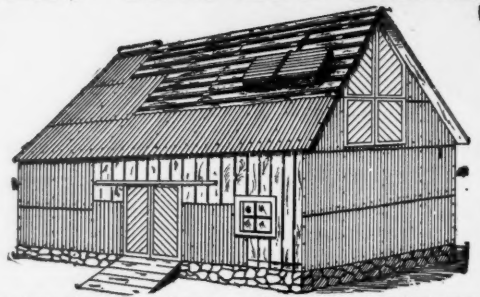


Flat, unpainted steel sheets, light weight, 24 in. wide, 3 to 8 ft. long, 100 sq. feet.....	\$1.60
Painted, same as above, 100 sq. feet.....	\$1.70
Flat, galvanized, rust-proof steel sheets, standard wt., 24 and 36 in. wide, 3 to 7 ft. long, 100sq. feet..	\$3.00

Read our Freight Prepaid Offer.

Fill in carefully the coupon below. Send it to us and we will mail you at once free of all cost samples of the very best "galvanized rust-proof" roofing, ceiling and siding for your examination.

These samples are large and generous enough to show you the quality of the large sheets, the prices on which are quoted in this ad. This special spring offer made in time for the farmer or town resident who wants to begin improvements—shipments made anywhere—take advantage of this great bargain sale while the offer lasts. No matter for what purpose you require the metal covering, you will not buy roofing, siding or ceiling again this year at lower prices than quoted in this ad. These metal coverings, proven by over 60 years of actual experience, to be the most economical and longest lasting in the market, far superior to shingles, excelling ready roofing, and better than slate which is seven times heavier and breaks from freezing or thawing. Our "galvanized, rust-proof" steel covering keep buildings warmer in winter and cooler in summer; does not taint your rain water.



Only tool needed to lay is a hammer, except with Standing Seam Steel Roofing

Rust-Proof Galvanized Steel ROOFING=SIDING=CEILING


Note our wonderfully low prices—lower than those ever quoted by any factory or any other manufacturer anywhere. Send for samples at once. Get in your order now for spring improvements. Suitable for every purpose. Fully guaranteed. Requires no painting, economical and easy to put on, no previous experience necessary; absolutely guaranteed, brand new, clean stock—bright as a dollar.

The sheets are full sized and come in corrugated "V" crimped standing seam or plain flat sheets, heavily galvanized on both sides with most approved galvanizing material. The preparation will adhere forever. Galvanized means that the steel has been coated with liquid zinc, which makes absolutely rust and weather-proof. Not affected by heat or cold. Square means 100 square feet.

Makes your insurance cheaper. Sold direct from our own roofing factory, the largest in the world. The Chicago House Wrecking Co. sells more roofing material than any other concern. Used in all climates for every kind of a building. Suitable for farm houses, barns, stores, city dwellings, poultry houses, etc. Our prices defy all roofing competition. Don't buy until you see our samples. Our liberal offer to ship subject to your examination is proof of our confidence that our material will meet with your entire satisfaction after the closest scrutiny.

LIGHTNING-PROOF-FIRE-PROOF-WATER-PROOF


STANDING SEAM STEEL ROOFING



Standing Seam, unpainted steel sheets, light wt., 24 in. wide, 3 to 8 ft. long, 100 sq. feet.....	\$1.85
Painted, same as above 100 sq. feet.....	\$1.95
Standing Seam, galvanized, rust-proof steel sheets, standard weight, 24 to 36 in. wide, 3 to 7 ft. long, 100 sq. feet.....	\$3.25

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BEADED CEILING AND SIDING



Beaded, unpainted steel sheets, light weight, 24 in. wide, 3 to 8 ft. long, 100 sq. feet.....	\$1.85
Painted, same as above, 100 sq. feet.....	\$1.95
Beaded, galvanized, rust-proof steel sheets, standard wt., 24 to 36 in. wide, 3 to 7 ft. long, 100 sq. feet.....	\$3.25

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"VV" CRIMPED STEEL ROOFING



2-V Crimped, unpainted steel sheets, light wt., 24 in. wide, 3 to 8 ft. long, 100 sq. feet.....	\$1.85
Painted, same as above, 100 sq. feet.....	\$1.95
2-V Crimped, galvanized, rust-proof steel sheets, standard wt., 24 to 36 in. wide, 3 to 7 ft. long, 100 sq. feet.....	\$3.25

Read our Freight Prepaid Offer.

Unpainted and Painted Steel Roofing

We also quote in this advertisement steel sheets unpainted, also painted. These are identical to the same sheets as the galvanized rust-proof, except are not coated with zinc. While the unpainted and painted sheets will not last as long as the galvanized rust-proof, yet you can use them with a perfect degree of safety that they will last a good many years and give splendid service, and of course the first cost is not as much as the galvanized rust-proof nor can you expect the same amount of wear, so we believe in the end the galvanized rust-proof is by far the best proposition. However, if you feel that you want to make the smallest possible investment in roofing, why then buy the unpainted or painted steel sheets, all of which are covered by our guarantee as printed below, and if you so desire we would be glad to send you samples free of unpainted or painted sheets, quoted in this advertisement.

Our Guarantee

The Chicago House Wrecking Co., manufacturers of these steel coverings, positively guarantee entire satisfaction on every order, or money refunded without delay or argument. The material may be returned at our expense both ways if it is not up to our representation and entirely satisfactory. We are headquarters for roofing supplies of every kind and our stock is always complete, covering every style at prices from \$1.25 per 100 square feet and up. Our million dollar capital stock and surplus is sufficient evidence of our responsibility. We want all your inquiries of merchandise. Our roofing department is one tremendous branch of a business of the greatest magnitude. We are constantly buying complete stocks of new, high-grade goods at sheriffs', receivers' and manufacturers' sales, carrying in stock a full line of building material, including lumber, sash, doors and anything needed for a building; wire fencing, machinery, gasoline engines, traction outfits, furniture, household goods, plumbing material, heating apparatus, water work system and hardware of every kind.

FREIGHT PAID!

At prices quoted in this ad. we will prepay the freight on all Roofing, Siding and Ceiling orders in full to all points east of Colorado in the United States except Oklahoma and Texas. 15c per square additional for these two states. To all points west of Colorado in the United States, 50c per square additional.

How to Order Add 10% to your surface measurement, allowing for laps; send us sketch of your building showing size of dimensions, so that we can send you proper length of sheets to lay economically and avoid waste.

Our Free Roofing Book Our 1910 book on Roofing, Siding and Ceiling sent free for a coupon. Tells how to lay Roofing or Siding and contains much valuable information. Send in your name today. Get our big catalogue, the wonderful "Price Wrecker," containing our newest and latest bargains on building material and merchandise of all kinds.

"Galvanized, Rust-Proof" Shingles

Beautiful in design and make. Ideal for roofing or siding for any style of a building. Come in sheets size 18 by 24 in. Send coupon and get our "Roofing Book." We are headquarters for metal shingles and will save you from 30% to 50% over retail prices for metal shingles of same quality sold at retail. Our special spring offer price, per 100 sq. ft.....



The price on these shingles is F. O. B. Chicago.

FREE SAMPLES!

Coupon No.69--Mail it!

CHICAGO HOUSE WRECKING CO.,
W. 35th & Iron Sts., Chicago, Illinois.

Please send me copy of your latest Roofing Catalog, free.

Kind of building.....

Size of roof.....

If you want Siding or Ceiling give diagram and full dimensions.....

When do you expect to order?.....

Name.....

P. O.....

R. F. D. & State.....

Shall we send you our general catalog?....

Are you interested in lumber?.....

Heating apparatus?.....Furniture?.....

Plumbing supplies?.....Clothing?.....

Wire and fencing?.....

Building supplies?.....

We recommend Galvanized Rust-Proof as by far the best kind of Steel Covering, although Painted Steel Roofing, Siding and Ceiling will give splendid service.
CHICAGO HOUSE WRECKING CO. W. 35th & Iron St. CHICAGO, ILL.

ON ROOF 17 YEARS: GOOD FOR 24 YEARS MORE.

Chicago House Wrecking Co., Chicago, Ill.
Gentlemen—17 years ago I bought sufficient Corrugated Steel Roofing from you for roofs and sidings for two large horse barns (34 bed stalls), and carriage house, and am to-day painting the roofing for the fourth time, and the material seems to be almost as good as the day I put it on and I confidently expect it to last 20 years longer.
Yours very truly,
(Signed) GEO. F. ANDERSON, Ky.

A FINE PIECE OF GOODS.

Chicago House Wrecking Co., Chicago, Ill.
Gentlemen—Received the "V" Crimped Roofing O. K., and it's certainly a splendid piece of goods. Thanking you for prompt and square dealing, I remain, yours for more biz.,
(Signed) BERT WHALEY, N. Y.

EXACTLY AS REPRESENTED.

Chicago House Wrecking Co., Chicago, Ill.
Gentlemen—Please send me your catalog on wire fencing, bath tubs and iron pipe, as I purchased some iron roofing from you in 1905 and found it to be exactly as represented and giving good service.
Very truly,
(Signed) W. A. MCKENZIE, N. D.

VERY MUCH PLEASED.

Chicago House Wrecking Co., Chicago, Ill.
Gentlemen—I will say I received my Roofing all O. K. and have it laid. It is fine Roofing and I am very much pleased with it. Some of my neighbors have seen it and they say I could not get such Roofing as this in the city of St. Albans for less than \$2.75 or more. I shall advertise it all I can. Received catalog also.
Thanking you for your prompt attention and kindness, I remain,
Yours truly,
(Signed) JOSEPH McCRAE, Vt.

BEADED CEILING LOOKS FINE.

Chicago House Wrecking Co., Chicago, Ill.
Gentlemen—We received your check for \$1.02, being the refund on the freight paid by us on steel Ceiling, through the oversight of the railroad company, and thank you for same. We have the beaded steel ceiling on and it looks fine. It worked out all O. K., and it is a success in every way. Please send me a new catalog as I want some more material.
Yours truly,
GREEN COUNTY ABSTRACT CO. (Signed by) A. L. Sarchet, Secy., Iowa.

WILL ORDER MORE.

Chicago House Wrecking Co., Chicago, Ill.
Gentlemen—Am pleased to say the roofing all here and in splendid shape. Allow me to congratulate you on so prompt delivery. You will receive more orders from me. Respectfully,
(Signed) D. DUCELLO, Neb.